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MEVSİMLİK TARIM İŞÇİSİ KADINLARIN SAĞLIK OKURYAZARLIĞI DÜZEYLERİNİN VE SOSYAL DESTEK ALGILARININ MEME KANSERİ ERKEN TANI DAVRANIŞLARINA ETKİSİ

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Öz

Meme kanseri dünya çapında yıkıcı bir etkiye sahip olmaya devam ediyor. Meme kanseri erken tanı davranışlarının gerçekleşmesinde kadınların sağlık okuryazarlığı düzeyi ve sosyal destek algısı önemli bir yere sahiptir.Araştırmanın amacı mevsimlik tarım işçisi kadınların sağlık okuryazarlık düzeylerinin ve sosyal destek algılarının meme kanseri erken tanı davranışlarına etkisini incelemektir. Araştırma tanımlayıcı tiptedir. Araştırmanın verileri Kasım 2020 ile Haziran 2021 tarihleri arasında bir aile sağlığı merkezi bölgesinde toplanmıştır. Araştırmaya 20 yaş üstü 353 mevsimlik tarım işçisi kadın katılmıştır. Araştırmanın verileri Statistical Package for Social Sciences 20.0 paket programı kullanılarak değerlendirilmiştir. Verilerin analizinde ki-kare testi, Mann Whitney U testi ve bağımsız gruplar t testi kullanılmıştır. Kadınların kendi kendine meme muayenesi ile çok boyutlu algılanan sosyal destek ölçeği (t= 3,085, p=0,002) ve sağlık okuryazarlığı ölçeği (t= 2,173, p=0,0031) puan ortalamaları arasında anlamlı bir fark saptanmıştır. Sağlık okuryazarlığı ve Sosyal destek algılarının arttırılmasına ve sürekliliğinin sağlanmasına yönelik eğitim programlarının planlanması ve uygulanması önerilebilir.

Anahtar Kelimeler: Mevsimlik tarım işçileri, Sağlık okuryazarlığı, Sosyal destek algısı, Erken tanı davranışları, Meme kanseri.

THE EFFECT OF THE HEALTH LITERACY LEVELS AND SOCIAL SUPPORT PERCEPTIONS OF SEASONAL FEMALE AGRICULTURAL WORKERS ON BREAST CANCER EARLY DETECTION BEHAVIORS

Abstract

Breast cancer continues to have a devastating impact worldwide. Women's level of health literacy and perception of social support have an important place in the realization of breast cancer early diagnosis behaviours. The aim of study is to examine the the effects of health literacy levels and Social support perceptions of seasonal female agricultural workes on breast cancer early detection behaviors. The research is of descriptive type. The data of the study were collected between November 2020 and June 2021 in a family health centre region. The study based on 353 seosanal female agricultural workers over the age of 20. The data of the study were evaluated using the Statistical Package for Social Sciences 20.0 package program. Chi-square test, Mann Whitney U test and independent groups t-test were applied to analyze the data. A statistically significant difference was found between women's breast self-examination and the mean scares of the multidimensional perceived social support scale (t= 3.085, p=0.002) and the health literacy scale (t= 2.173, p=0.0031). It can be recomended to plan and implement training programs to increase health literacy and Social support perceptions and to ensure their continvity.

Keywords: Seaosonal agricultural workers, Health literacy, Social support perception, Early detection behaviors, Breast cancer.

1. INTRODUCTION

Breast cancer continues to have a devastating impact worldwide (1). The most important information in this process is that early diagnosis is important in the treatment and prognosis of the disease (2). Women's level of health literacy (HL) and perception of social support have an important place in the realization of breast cancer early diagnosis behaviours (3,4).

Whether individuals take appropriate decisions about their health can be determined by their level of HL (5). Limited level of HL causes negative consequences such as delay in seeking health care, inability to understand their current state of health, inability to comply with medical instructions, increase in health-related costs and mortality, ineffective use of preventive health services, and unnecessary hospitalization (6). At the same time, Social support is important in maintaining and improving health. In the literature, it is seen that social support is effective in early diagnosis behaviours of breast cancer (7,8). Seasonal agricultural worker (SAW) women, a disadvantaged group, emerge as a group that should be addressed in terms of breast cancer early diagnosis behaviours due to adverse living conditions. It is thought that HL and social support perception are important in the realization of breast cancer early diagnosis behaviours in SAW women, as in every woman. At this stage, public health nurses have an important role in empowering SAW women in terms of HL and social support. It is important to determine the current situation and to plan nursing initiatives for preventive health behaviours in order to empower SAW women in the serviced community in terms of HL and social support. Therfore, the study was conducted to examine the effects of women's HL levels and social support perceptions on breast cancer early diagnosis behaviours.

2. METHODS

The research is of descriptive type. Data were collected between November 2020 and June 2021 in a family health centre region. The population of the study consisted of 4386 women over the age of 20 living in a family health centre region. The sample consisted of 353 women. A sample calculation was made from a known population.

Within the inclusion criteria, being a female seasonal agricultural worker, being literate, being over 20 years old, being able to speak and understand Turkish, and not having any findings related to breast cancer are included.

Individual Identification Form: The form consists of 22 questions including socio-demographic characteristics of individuals and their knowledge and behaviours regarding breast cancer early diagnosis behaviors (2).

Health Literacy Scale (HLS): The scale developed by Sorensen et al. consists of 47 items and two parts (9). The scale was later simplified by Toçi, Bruzari, and Sorenson, and its validity and reliability were tested (10). The validity and reliability study of the Turkish version of the study in our country was carried out by Aras and Temel between December 2014 and January 2015 (11). The scale consists of 25 items. The scale has four sub-dimensions. These are: access, understanding, appraisal and application. Scale scores vary between 25 and 125. A five-point Likert type, in which individuals can give points between 1-5 is a scale. All items in the scale contain positive sentences. The higher the score, the higher the individual's HL level (10). While the total Cronbach's Alpha values of the scale are 0.92, the alpha values of the subscales are between 0.62-0.79 (11). In this study, the total Cronbach Alpha value was found to be 0.94.

Multidimensional Scale of Perceived Social Support (MSPSS): The scale was developed by Zimet et al. in 1988 (12). The validity and reliability study of the Turkish version of the study in our country was carried out by Eker et al. in 1995. The second validity and reliability study of the revised form of the scale was repeated by the same group in 2001. The number of scale items is 12. It has three sub-dimensions (family, friend, a special person). Reliability scores of the scale and its sub-

dimensions, total: 0.89; family: 0.85; friend: 0.88; other important person: 0.92. It is a seven-point Likert-type scale. After the sub-dimension scores consisting of four items in the scale are summed, the total scale score is reached. Total scale scores range from 12-84 (13). A high score indicates high perceived social support. While the total Cronbach Alpha value of the scale was 0.88; alpha values of subscales was determined for family 0.85; for friend 0.88; and for the other important person as 0.92. (14). In this study, the total Cronbach Alpha value of the scale was found to be 0.85.

The data were evaluated in the Statistical Package for Social Sciences (SPSS 20.0) package program. The suitability of the data to the normal distribution was analyzed. Number, percentage, and mean values from descriptive statistics were used. In addition, chi-square test, Mann Whitney U test, and independent groups t-test were performed.

Permission for the study was obtained from the XX Clinical Research Ethics Committee (dated 23.11.2020, session 20 and decision numbered 01), the X Provincial Health Directorate and the individuals who will participate in the study.

3. RESULTS

The mean age of the women was 31.03 (±8.35), and 62.6% were married, 35.7% were university graduates, and 81.9% were not working. In addition, it was determined that 54.4% of them have health insurance, 36.6% of them have less income than their expenses, 58.9% of them have income equal to expenses, 46.3% of them live with their spouses and children. 51.6% of the women stated that they perceived their health as good and 43.9% of them as moderate.

Table 1. Distribution of Characteristics of Seasonal Female Agricultural Workers Related to Breast Cancer and Early Diagnosis Behaviours

Characteristics	Number (n)	Percentage (%)
History of Breast Cancer in The Family		
Yes	84	23.8
No	269	76.2
The State of Hearing about Breast Cancer Early Diagnosis Behaviours		
Yes	173	49.0
No	180	51.0
The State of Getting Information About Breast Cancer and Early Diagnosis Behaviours		
Yes	182	51.6
No	171	48.4
Information resources (n=182)		
From a healthcare professional	121	66.5
From television or radio	29	15.9
From books, magazines, or brochures	21	11.5
Other	11	6.1
If You Have Not Received Information, Would You Like to Receive Information? (n=171)		
Yes	114	66.7
No	57	33.3
BSE Performing Status		
Yes	136	38.5
No	217	61.5
BSE Frequency		
Never	214	60.6
Sometimes	98	27.8
Every month	41	11.6
Reasons for not Performing BSE (n=217)		
I don’t know	97	44.7
I have no time	19	8.8
I could have breast cancer	1	0.5
Breast cancer happens in older women	13	6.0
I don’t need	83	38.2

I have more important problems	4	1.8
CBE Status (n=63)		
Yes	44	69.8
No	19	30.2
Mammography Status (n=63)		
Yes	31	49.2
No	32	50.8
Mammography Frequency		
Never	32	50.8
Sometimes	5	7.9
Once a year	5	7.9
Once in two years	21	33.4
Reasons for not Having a Mammogram (n=32)		
I don't know	14	43.8
Not thinking somebody can't have breast cancer by herself	8	25.0
Not taking time	3	9.4
Thinking that a mammogram is radiating	3	9.4
Male doctor	4	12.4

76.2% of the women did not have a family history of breast cancer, 51% did not hear about breast cancer early diagnosis behaviours, 51.6% received information about breast cancer and early diagnosis behaviours, 66.5% of those who received information received this information from health personnel, 66.7% of those who did not receive information stated that they wanted to get information. 38.5% of SAW women stated that they did BSE, while 44.7% of those who did not do BSE stated that they did not do it because they did not know. In addition, 69.8% of women stated that they had CBE and 49.2% of them had mammography. 43.8% of women who did not have a mammogram stated that they did not have it because they did not know (Table 1).

In the study, when the mean scores of the women in the sub-dimensions of HLS were examined, it was found that the sub-dimension of access to information was 18.04 (±5.24), the sub-dimension of understanding information was 26.00 (±6.54), the sub-dimension of evaluation was 30.37 (±6.91), and the sub-dimension of practice was 20.22 (±4.04). The total mean score of the Health Literacy Scale was determined as 94.64 (±19.62). When the mean scores of women in MSPSS sub-dimensions were examined; the family sub-dimension was 22.58 (±5.64), the friend sub-dimension was 19.16 (±6.94), and a special person sub-dimension was 18.09 (±8.27). The mean total score of this scale was determined as 59.84 (±15.93).

A significant difference was found between the BSE behaviour of SAW women according to their employment status (X2 =7.034; p=0.008), income status (X2=7.660; p=0.022) and health insurance (X2=3.930; p=0.047). There was no statistically significant difference between having CBE and the women's marital status (X2=0.932 p=0.334), employment status (X2=0.314 p=0.575), health insurance (X2=0.637 p=0.425), health perception status (X2=0.705 p=0.703) and having a family history of breast cancer (X2=1.436 p=0.231). In addition, the difference between having mammography (X2=5.069; p=0.024) and women's health insurance (X2=4.585 p=0.032) and family history of breast cancer was also found to be significant.

Table 2. Comparison of the Mean Scores of the Multidimensional Scale of Perceived Social Support of Seasonal Agricultural Women Workers with Breast Cancer Early Diagnosis Behaviours

Breast Cancer Early Diagnosis Behaviours	Multidimensional Scale of Perceived Social Support			
	Family	Friend	A Special Person	Total
	X̄±SD	X̄±SD	X̄±SD	X̄±SD

BSE Performing Status				
Yes	23.41 ± 4.86	20.25 ±6.67	19.34 ± 7.80	63.02 ± 14.60
No	22.05 ± 6.03	18.48 ± 7.03	17.30 ±8.47	57.84 ± 16.44
Statistical Value	**t=2.325 p=0.021**	**t= 2.349 p=0.019**	**t= 2.317 p=0.021**	**t= 3.085 p=0.002**
***CBE Performing Status**				
Yes	21.63±6.23	18.40±6.71	17.81±8.07	57.86±16.42
No	20.57±7.01	17.47±7.32	16.68±8.80	54.73±17.71
Statistical Value	U=384.500, p =0.613	U=399.500, p =0.781	U=385.500, p =0.625	U=378.000, p =0.549
***Having Mammography Status**				
Yes	22.41 ± 5.18	18.16 ± 6.76	17.22 ± 8.18	57.80 ± 14.54
No	20.25 ± 7.38	18.09 ± 7.04	17.71 ± 8.42	56.06 ± 18.82
Statistical Value	t=1.353, p=0.182	t= .039, p=0.969	t= -.235, p=0.815	t= .410, p=0.683

*Women over 40 years of age were included.

A significant difference was found between performing BSE and MSPSS sub-dimensions friend (t= 2.349; p=0.019), a special person (t= 2.317; p=0.021), family (t=2.325; p=0.021) and total mean scores (t= 3.085; p= 0.002). There was no statistically significant difference between women's CBE status and MSPSS sub-dimensions of family (U=384.500; t =0.613), friend (U=399.500; t =0.781), a special person (U=385.500; t =0.625) and total (U=378,000; t) mean scores. Moreover, there is not a statistically difference between the mammography status SAW women and MSPSS sub-dimensions of family (t=1.353; p=0.182), friend (t= .039; p=0.969), a special person (t=-.235; p=0.815) and total (t) = .410; p=0.683) mean scores (Table 2).

Table 3. Comparison of Health Literacy Scale Mean Scores of Seasonal Agricultural Women Workers with Breast Cancer Early Diagnosis Behaviours

Breast Cancer Early Diagnosis Behaviours	**Health Literacy Scale**				
	Access to Information X̄±SD	**Understanding Information X̄±SD**	**Appraisal/ Evaluation X̄±SD**	**Applying/ Using X̄±SD**	**Total X̄±SD**
BSE Performing Status					
Yes	19.37±5.39	26.67±6.89	31.22 ± 7.64	20.35±4.16	97.63±21.92
No	17.21±4.97	25.58±6.30	29.83 ± 6.38	20.13±3.97	92.77±17.82
Statistical Value	**t=3.847 p=0.000**	**t=1.520 p=0.129**	**t=1.848 p=0.065**	**t=.484 p=0.628**	**t=2.173 p=0.031**
***CBE Performing Status**					
Yes	18.75 ±4.64	24.02±6.81	29.31±7.33	19.43±3.88	91.52±21.13
No	16.89±4.64	24.31±5.36	28.94±5.14	19.78±3.35	89.94±15.39
Statistical Value	U=331.000 p =0.191	U=407.000 p =0.869	U=403.000 p =0.822	U=402.000 p =0.809	U=396.500 p =0.747
***Having Mammography Status**					
Yes	19.19 ± 4.58	24.51 ± 6.78	30.03 ± 6.95	19.29±4.04	93.03 ± 20.94
No	17. 21 ± 4.64	23.71 ± 6.28	28.40 ± 6.48	19.78±3.40	89.12 ± 18.06
Statistical Value	**t=1.697 p=0.095**	**t= .484 p=0.630**	**t= .960 p=0.341**	**t=-.522 p=0.604**	**t= .794 p=0.430**

*Women over 40 years of age were included.

A significant difference was found between the BSE status of women and between the HLS sub-dimension of access to information (t=3.847; p=0.000) and the total score averages (t=2.173; p=0.031), but there was not a statistically significant difference between the mean scores of the sub-dimensions of understanding information (t=1.520; p=0.129), appraisal/evaluation (t=1.848; p=0.065) and applying/using (t=.484; p=0.628). It was found that there was no significant difference between having BSE of SAW women and the sub-dimensions of access to information (U=331.000; p =0.191), understanding information (U=407,000; p =0.869), appraisal/evaluation (U=403,000; p=0.822), applying/using (U=402,000; p=0.809) and the total (U=396.500; t=0.747) mean scores. There was not a significant difference between the women's having mammography and the sub-dimensions of access to information (t=1.697; p=0.095), understanding information (t=.484; p=0.630), appraisal/evaluation (t=.960; p=0.341), applying/using (t=-.522; p=0.604) and the total (t= .794 p=0.430) mean scores (Table 3).

4. DISCUSSION

In the study, it was determined that more than half of the SAW women did not perform BSE (61.5%), did CBE (69.8%), and never had mammography (50.8%). In the study of Çidem and Ersin (2019), it was determined that more than half of the women did not perform BSE (15). In Avcı's (2020) study, 36.2% of women did not perform BSE (16). Studies show that the rate of women who have CBE varies between 13% and 64% (17,18).

Like this study, in the study conducted by Aksoy et al. (2015), it was determined that 61% of the participants did not have mammography (19). In the study of Çelikkanat and Sohbet (2019), it was determined that 82.5% of women did not undergo mammography (20). In the study conducted by Öztoprak and Ege (2021), the frequency of screening behaviours for breast cancer such as mammography was not found to be sufficient (21).

In studies conducted with disadvantaged groups such as SAW women, disabled women, and poor women, it is stated that women do not perform breast cancer early diagnosis behaviours at a sufficient level (18,22).

Although more than half of the SAW women (51.6%) have received information about breast cancer early diagnosis behaviours, the low rates of those who do BSE, have CBE, and have mammograms suggest that they do not have sufficient awareness of this issue and that the continuity of training on this issue is not provided. In addition, the working conditions of SAW women may also have an impact on these results. Because SAW women do not have sufficient physical conditions for these examinations, they have problems in reaching health institutions. In addition, the fact that almost half of the women did not have BSE (44.7%) and did not have mammography (50.8%) supported the result of the study.

In this study, it was determined that more than half of the SAW women (51.6%) had previously received information about breast cancer and early diagnosis behaviours, and the information was mostly obtained from health personnel (66.5%). In the study of Karaca and Koyucu (2020), 74.4% of women stated that they were informed about BSE, and 39.3% stated that they received this information from newspapers/magazines-TV/radio (23). In the study of Öztoprak and Ege (2021), 95.3% of the participants stated that they had heard of cancer screenings, and 56.9% received the information from health personnel. In addition, in another study, it was found that half of SAW women did not have knowledge about breast cancer early diagnosis behaviours (21).

The fact that most of the SAW women in this study state that they do not practice early diagnosis behaviours because they do not know is important in terms of supporting the necessity of education. In addition, the fact that SAW women do not have sufficient access to information and cannot receive sufficient professional support can be explained by the difficulties in working

conditions. In this study, it was determined that employment status, income status, and health insurance affect BSE, and in addition, health insurance and a family history of breast cancer affect having mammography.

In study examining early diagnosis and behaviours of breast cancer, it has been reported that diagnostic features such as age, education status, marital status, income, and health insurance have an effect on early diagnosis behaviours (23,24). In the study conducted by Duman et al. (2015), the level of education and the status and frequency of BSE were found to be statistically significant and as the level of education increases, the rates of performing and applying BSE increase (25). In another study, it was found that having a family history of breast cancer affected having a mammogram, but educational status did not affect having a mammogram (26). Like this study, Aksoy et al. (2015) found that there was a statistically significant difference between the mammography rates of women with health insurance. In the same study, it was stated that women's education level, marital status, employment status, and health insurance did not affect CBE. It is an expected result that health insurance affects the behaviour of SAW women to perform BSE and have mammography19. Because women who do not have health insurance prefer to wait as long as they do not encounter any health findings that will interfere with their social life standards. In addition, it is an expected result that having a family history of breast cancer affects mammography behaviour in SAW women. Having a history of breast cancer in family members will increase the awareness level of individuals. Therefore, this result suggests that the awareness levels of SAW women are affected.

When the effect of MSPSS score averages on breast cancer early diagnosis behaviours was examined in this study, it was seen that the MSPSS sub-dimensions of family, friend, a special person, and total score averages of SAW women who performed BSE were significantly high. In addition, it was determined that women who had CBE had high MSPSS sub-dimensions of family, friend, special person, and total score averages. The mean scores of the women who had mammography were higher than those who did not have according to the sub-dimensions of family, friend, and total score.

Like this study, in a study reported that there is a relationship between social support and BSE behaviour (8). In another study, it was determined that the mean MSPSS score of women who do BSE, have CBE, and have mammography are higher than women who do not do BSE, do not have CBE, and do not have mammography (15). In Tatar and Ersin's (2021) study on disabled women, it was determined that the average score of women who did BSE, had CBE, and had mammography was higher than those who did not (26).

As a result, the high mean MSPSS scores of SAW women who had BSE, had CBE, and had mammography reflect the support they receive from family, friends, and people they see as special person. In addition, these results show that social support is important in the realization of protective behaviours. In the study, it was determined that the total mean score of the health literacy scale of women who did BSE, had CBE, and had mammography was high. In addition, it was found that women's HLS sub-dimensions of access to information and total score averages affected BSE. Mazor (2014), Çopurlar and Kartal (2016) found that BSE and mammography were associated with insufficient health literacy levels (27,28). Fernandez et al. (2016), on the other hand, stated in their study that the rate of having a mammogram is high for women with a sufficient level of health literacy, while the rate of BSE for women with an insufficient level of HL is also low (3). On the other hand, Yılmazel (2018), in his study examining the relationship between breast cancer behaviour and awareness and health HL, stated that there is a significant relationship between breast cancer awareness and the frequency of having mammography (29). In a study it was found that participants with low health literacy had a lower tendency to adopt breast cancer preventive behaviours (30). In this study, the high HLS score averages of SAW women who practiced breast cancer early diagnosis behaviours is important in terms of showing that they have a high level of awareness on health-related issues. In addition, the results of the study are important in terms of showing that SAW women can access information in the environments they work.

5. CONCLUSION AND RECOMMENDATIONS

It was also determined that MSPSS and HLS total score averages affected BSE performance. In addition, it was determined that women who performed BSE, had CBE, and had mammography had higher MSPSS and HLS total score averages. It is recommended to plan trainings by health personnel to increase the knowledge of SAW women about breast cancer, to provide these trainings when appropriate in the working environment, and to provide mobile health services in the environments where they work to facilitate the early diagnosis behaviors of SAW women.

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