

Health Promoting Life-Styles Among Immigrant and Nonimmigrant Women*

Sevcan Topçu** Ayşe Beşer***

Abstract

Background: As a social issue, migration causes an immediate, quick change in the environment and have effects on physical, cultural and social structure of a society and affects public health. **Objective:** This is a descriptive, comparative study and was performed to compare health promoting life-styles and confounding factors among migrant and nonmigrant women. **Methods:** The study sample included 210 migrant, 210 non-migrant women. Data were collected with “Socio-demographics Questionnaire”, “Health Promoting Lifestyles Profile (HPLP)”. Data were evaluated with variance analysis, t test and Pearson Correlation analysis. **Results:** The mean HPLP score of the migrant, non-migrant women were 2.28±0.28, 2.43±0.32 respectively. Both the migrant and nonmigrant women got the highest scores on interpersonal support and the lowest scores on exercise. The non-migrant women received significantly higher scores on HPLP, health responsibility, nutrition, stress management comparing to the non migrants (p<.05). **Conclusion:** For this reason, health staff, responsible for the first-line health services, especially nurses working with migrant women should give priority to this group of women. It can also be suggested that education programs directed towards promotion of health behaviors among migrant women and taking the confounding factors of health behaviors such as demographics into account should be developed.

Key Words: Health promotion, Internal migration, Nursing, Women.

Göç Eden Ve Göç Etmeyen Kadınların Sağlığı Geliştirme Davranışları

Giriş: Ani ve hızlı bir çevre değişimi yaratan, toplumun fiziksel, kültürel ve sosyal yapısı üzerinde etkilere sahip, toplumsal bir olgu olan göç toplum sağlığını da etkilemektedir. **Amaç:** Bu karşılaştırmalı, tanımlayıcı çalışmada göç eden ve göç etmeyen kadınların sağlığı geliştirme davranışlarını ve etkileyen faktörleri değerlendirmek amacıyla yürütülmüştür. **Yöntem:** Çalışmanın örneklemini göç eden 210 ve göç etmeyen 210 kadın oluşturmuştur. Veriler “Sosyo-demografik Soru Formu”, ve “Sağlığı Geliştirici Yaşam Biçimi Ölçeği (SGYB)” kullanılarak toplanmıştır. Veriler varyans analizi ve t testi ile değerlendirilmiştir. **Bulgular:** Göç eden ve göç etmeyen kadınların SGYB ölçeği puan ortalamaları sırasıyla 2.28±0.28, 2.43±0.32’dir. Göç eden ve göç etmeyen kadınlar kişilerarası destek alt ölçeğinde en yüksek, egzersiz alt ölçeğinde ise en düşük puanları almışlardır. Göç etmeyen kadınlar göç eden kadınlara göre, SGYB, sağlık sorumluluğu, beslenme ve stresle başetmede anlamlı yüksek puanlar almışlardır (p<.05). **Sonuç:** Bu nedenle, Birinci basamak sağlık hizmetlerinde yer alan sağlık personeli, özellikle de bu gruplarla çalışan hemşireler göç eden kadınlara öncelik sağlamalıdır. Göç eden kadınların sağlık davranışlarının geliştirilmesi için demografik faktörler gibi sağlık davranışlarını etkileyen faktörler de dikkate alınarak eğitim programları hazırlanmalıdır.

Anahtar Kelimeler: Sağlığı geliştirme, İç göç, Hemşirelik, Kadın.

Geliş tarihi:06.10.2010 Kabul tarihi: 11.04.2011

Migration is moving from one place to another to live there for some part or the rest of life (International Organization for Migration [IOM], 2004a; Mutluer, 2003). Direct or indirect influences of globalization, regional conflicts, poverty, technological developments and the resultant transportation and communication opportunities have increased the number of migrants in the world. (Mutluer, 2003). In Turkey, internal migration is a very ancient and significant phenomenon. In countries, such as Turkey, where there is ethnic, linguistic, and cultural diversity, internal migrants mirror many characteristics of international migrants.

With the introduction of agricultural machinery and industrialization since 1950s, there have been socio-economic changes in Turkey, which has first given rise to internal migration and then external migration by the mid 1960s (Kocaman and Beyazit, 1993). The census in 2000 showed that 11 out of every 100 people migrated within the boundaries of the cities and 8 out of every 100 across the cities in Turkey between 1995 and 2000, which seems to be insignificant; however, the internal migrants has doubled in the past 25 years (State Institute of Statistics, 2004).

One of the most important causes of migration in Turkey was badly-planned economic and social welfare programs, which caused inequalities in the life standards between the rural and urban areas and social classes (Kızılcık, 1996).

Other causes of migration were new agricultural technologies, insufficient agricultural land, allocation of agricultural land through inheritance, increased population, restricted life-styles, attraction of urban areas in terms of employment, cultural and health facilities of the cities and terror in the southeast part of Turkey (Kocaman and Beyazit, 1993).

As a social issue, migration causes an immediate, quick change in the environment and have effects on physical, cultural and social structure of a society and affects public health (Topçu and Beşer, 2006). The migrant population faces many problems such as inadequate health facilities and health staff, low income, financial difficulties, inadequate nutrition, language problems, lack of health insurance and social and psychological stresses, all of which affect their health (Bayhan, 1996).

Studies on migration reported from both Turkey and other countries have revealed that migration has long-term effects on the main determinants of health and that the most serious health problem which causes death among the migrants was infectious diseases (Ertem, 1999; Hyman and Gruge, 2002; IOM, 2004b). Apart from infectious diseases, the migrants suffer from psychological and nutritional problems and stay in the districts where there is no clean tap water because of poor sanitization and inadequate infrastructure facilities and maternal and child care services and general health care facilities are inadequate (İpekyüz, 1996). Therefore, migrants should be given priority in

*Bu çalışma bir yüksek lisans tezidir (Göç Eden ve Göç Etmeyen Kadınların Sağlığı Geliştirme Davranışlarının Değerlendirilmesi, Dokuz Eylül Üniversitesi Sağlık Bilimleri Enstitüsü, Halk Sağlığı Hemşireliği Yüksek Lisans Tezi, 2006, İzmir). , XI. Ulusal Halk Sağlığı Kongresi’nde poster bildiri ve sözel bildiri olarak kabul edilmiştir (23-26.10.2007/ Denizli. **Araştırma Görevlisi Ege Üniversitesi Ödemiş Sağlık Yüksekokulu. Ödemiş, İzmir., sevcan.topcu@ege.edu.tr, ***Doçent Dr. Dokuz Eylül Üniversitesi Hemşirelik Yüksekokulu, Halk Sağlığı Hemşireliği Anabilim Dalı, Inciraltı, İzmir ayse.beser@deu.edu.tr).

terms of distribution of health care services and attempts should be made to protect and promote their health.

Literature review

In recent years, health promotion and disease prevention have been lauded as an effective means for increasing health status and for increasing levels of well-being. Health-promoting behaviors are conceptualized as activities that lead to a higher level of health and are driven by a desire for health rather than a fear of disease (Johnson, 2005; Pender, 1987).

Health-promoting behaviors incorporate self-actualization, health responsibility, exercise, nutrition, interpersonal support and stress management. These behaviors were indicators of an individual's health-promoting lifestyle (Pender, 1987). Health-promoting lifestyle is an integral part of health promotion, decreases both mortality and morbidity and plays an important part in prevention of heart diseases and cancer (Pender, 1987; Pender, Barbuskas and Hyman, 1992).

There have been a large number of studies on health promotion behaviors (Ahijevych and Bernhard, 1994; Duffy, Rossow and Hernandez, 1996; Hyman and Gruge, 2002; Johnson, 2005) but these studies tend to focus on international migrants. However, internal migration is far more significant in terms of the numbers of people involved. Evidence also suggests that except for a few countries, internal migration is on the rise (Altnyelken, 2009).

Johnson (2005), Ahijevych and Bernhard (1994), and Duffy et al. (1996) reported that migrant women did not do sufficient exercise, but were enthusiastic about self-actualization, interpersonal support for their relatives and had moderate health responsibility. Al Ma'aitah and Haddad (1999) found that Jordanian women showed intermediate levels of health promotion behaviors in the areas of self-actualization, nutrition, interpersonal support and stress management, while they demonstrated much lower for health responsibility and exercise.

Many studies have explored the influence of demographic variables and perceived health status on health promotion behaviors. Walker, Sechrist and Pender (1987) reported significant positive associations between education and income and the behaviors of good nutrition, interpersonal support and stress management. Ahijevych and Bernhard (1994) in a study of African American women reported that age, education, income and presence of a medical problem were significantly and positively related with engaging in health promotion behaviors.

Duffy et al. (1996) found that age, education were related to health promotion behaviors in Mexican American women. Walker, Madeleine, Pender (1990) also reported that individuals with a positive perception of health status were more likely to acquire health promotion behaviours than those with a poor-very poor perceived health status.

Studies by Sayan, Erci (1999) and Tokgöz (2002) from Turkey showed the women to have satisfactory health promotion behaviour scores. Sayan and Erci (1999) also noted that as age increased, health responsibility, exercise, nutrition, stress management and health promoting behaviour improved.

However, to our knowledge, there have been no comparative studies on health promoting life styles and confounding factors among migrant and non-migrant women. It is agreed that women play an essential part in health promotion behaviours of family members and are considered

as caregivers for their families particularly in Muslim cultures (Al Ma'aitah and Haddad, 1999). Higgins and Learn (1999) also emphasized that women take a better care of their families' health rather than their own health. However, as well as children and adolescents, women are most likely to be affected by migration. Therefore, evaluation of health behaviours among migrated women are important in order to protect and promote the women's and their families' health.

It is required that health staff should motivate individuals for health promotion although individuals are responsible for their own health behaviours (Walker et al. 1987). Only health promotion programs can help individuals to acquire healthy lifestyle behaviours and descriptive studies are needed to determine health behaviours and to develop health promotion programs accordingly (Pender, 1987).

Objectives

The aim of this study was to compare health behaviours among migrant and non-migrant women and to determine confounding factors. The following research questions are sought in the paper:

1. How are the health promotion behaviours of migrant women?
2. How are the health promotion behaviours of non-migrant women?
3. Is there a difference between migrant and non-migrant women's health promotion behaviours?
4. What are the factors affect health promotion behaviours of migrant and non-migrant women?

Methods

Research type

This is a comparative, descriptive study.

Sample

The mean age of the migrant and non-migrant women was 36.77 ± 10.13 and 37.05 ± 10.65 years respectively. Out of all the migrant women, 70.5% were primary school graduates, 93.3% were housewives, 69.5% were living in a village, 22.5% in a small town and 8.1% in a city before moving to Naldöken, İzmir. Out of all the non-migrant women, 73.8% were primary school graduates and 91% were housewives. The migrant women were living in Naldöken for 1-47 years with a mean time of 15.69 ± 10.17 years. As for the causes of migration, 59.1% of the women migrated due to financial difficulties, 30.9% migrated because they got married and 10% migrated for other causes such as personal necessities, education and working facilities of the city, health problems, and getting invitation from their relatives.

Procedure

This study was performed in the district of Naldöken, İzmir, Turkey. The study included a total of 420 women - 210 migrant and 210 non-migrant women. Migrant women migrated into the district of Naldöken from different towns, villages, cities of Turkey. Non-migrant women were born in the district of Naldöken. A sampling procedure, recommended by the World Health Organization for screening programs, was used (Rothenberg et al. 1985).

First, the streets where the migrants and non-migrants resided were determined using records of health center and district. The 30 streets where the migrants resided were

randomly selected. Next, the houses at each street were listed and either the houses at the beginning or at the end of the streets were randomly selected. Then, selected households at each street were visited and the women aged 18 years or older, married or divorced and literate or educated were asked to complete the questionnaire. When the women residing in the selected households did not meet the above mentioned criteria, they were excluded from the study and the nearest household was visited. Finally, 210 migrant women -seven women from each street- were included in the study. Similarly, 210 nonmigrant women were included in the study.

Migrant and nonmigrant women were interviewed in their homes. Before the interviews, purpose of the study, data confidentiality and interview procedures were explained with each woman by the investigator. All of the migrant and nonmigrant women spoke only Turkish.

Instrument

A socio-demographic form was used and it included questions about age, marital status, education, employment status of the participants and their spouses, income, health insurance, presence of chronic diseases, health centers they visited in case of health problems, the reasons for not utilizing the health clinics, the place from which they moved, duration of residence in Naldöken, causes of migration, relatives in Naldöken, contact with their relatives and satisfaction with their life.

Health promoting lifestyle profile (HPLP)

HPLP was used to collect data about health behaviors. The scale was developed by Walker et al. (1987). It is composed of 48 items and 6 subscales and consists of questions about health promoting behaviors. The subscales were self-actualization, health responsibility, exercise, nutrition, interpersonal support and stress management. The total score reflects the healthy life-style behavior. Four more items were added to the scale and now the scale is composed of 52 items (Walker and Hill-Polerecky, 1996). The scale composed of 52 items was used in this study. Each respondent was asked to rate each item on a Likert's 1-to-4 response scale: where: 1 corresponds to never, 2 sometimes, 3 often and 4 regularly. Alpha coefficient reliability of the scale was .92 and alpha coefficient reliability of the subscales varied from .70 to .90. The reliability of the scale for Turkish population was tested by Akça (1998). Alpha coefficient reliability of the scale was .90 in Akça's study. In this study, Alpha coefficient reliability of the HPLP was .89.

Perceived Health Status

In order to evaluate perceived health status, the question "How do you feel in general?" was used. The answer very good corresponded to 5, good to 4, OK to 3, bad to 2 and very bad to 1. The participants who gave the first two answers had good perceived health status, but those who gave the last three answers had poor perceived health status (Soyer, 1998).

Data Analysis

Statistical analyses of the data were made with SPSS 11 package program and variance analysis, t test and Pearson Correlation analysis.

Ethical considerations

Approval was obtained from the ethical committee of the Nursing School of Dokuz Eylül University and the Health

Directorate of the city. The study participants gave oral informed consent.

Results

Both migrant and non-migrant women got the highest scores on interpersonal support, but the lowest scores on exercise. The mean HPLP scores received by the migrant and non-migrant women were 2.28 ± 0.28 and 2.43 ± 0.32 respectively. There was a significant relation between total HPLP scores and health responsibility, nutrition and stress managements scores of both migrant and non-migrant women ($p < .05$) (Table 1). Socio-demographic factors such as marital status, education, income, health insurance, perceived health, affected total HPLP scores and self-actualization, health responsibility, exercise, nutrition, interpersonal support and stress managements scores of migrant women (Figure 1). Education, income and perceived health of non-migrant women affected total HPLP scores and self-actualization, exercise, interpersonal support and stress managements scores (Figure 2).

However, the relation between age and total HPLP scores was weak and negative for both migrant ($r = -.35$; $p = .00$) and non-migrant women ($r = -.30$; $p = .00$). There was no significant difference between marital status and health responsibility, exercise, nutrition and stress management in the migrant women ($p > .05$). However, the migrant married women got significantly higher scores on self-actualization and interpersonal support than the migrant divorced women ($p < .05$). We could not carry out an analysis of the difference between marital status and health behaviours due to the small number of non-migrant divorced women. The migrant secondary school graduates and those with higher education received significantly higher scores on health behaviours in general and self-actualization, health responsibility, nutrition, interpersonal support and stress management individually ($p < .05$). Similarly, the non-migrant secondary school graduates and those with higher education got significantly higher scores on health behaviours in general, self-actualization, exercise, interpersonal support and stress management ($p < .05$). The migrant women with an income higher than their expenditures had significantly higher scores on health behaviours in general and exercise than the other groups ($p < .05$). The non-migrant women with an income higher than their expenditures had significantly higher scores than those with an income equal to or less than their expenditures on self-actualization, interpersonal support, stress management and health behaviours in general ($p < .05$).

The migrant women with a health insurance got significantly higher scores than those without a health insurance on health behaviours in general, self-actualization, health responsibility and interpersonal support ($p < .05$). We could not analyze the relation between health insurance and health behaviours for the non-migrant women due to the small number of the non-migrant women. There was no significant difference between migrant and non-migrant women in health responsibility, exercise and nutrition ($p > .05$). However, there was a significant difference in self-actualization, interpersonal support, stress management and health behaviours in general between the women with poor perception of health and those with good perception of health regardless of being migrant or non-migrant. In fact, the women with good perception of health had significantly higher scores on health behaviours in general, self-actualization, interpersonal support and stress management ($p < .05$).

Table 1. The Distribution of the Mean Scores the Women Received on Health Promoting Lifestyle Profile and its Subscales

Subscales	Migrant Women X±SD	Non-migrant Women X±SD	Significance	
			t	p
Self-actualization	2.59±0.50	2.67±0.51	- 1.62	.11
Health Responsibility	1.90±0.37	2.23±0.46	- 7.87	.00*
Exercise	1.54±0.33	1.60±0.39	- 1.89	.06
Nutrition	2.43±0.32	2.68±0.37	- 7.42	.00*
Interpersonal Support	2.72±0.43	2.76±0.51	- 0.83	.41
Stress Management	2.42±0.38	2.55±0.43	- 3.23	.00*
HPLP	2.28±0.28	2.43±0.32	- 5.27	.00*

*p< .01

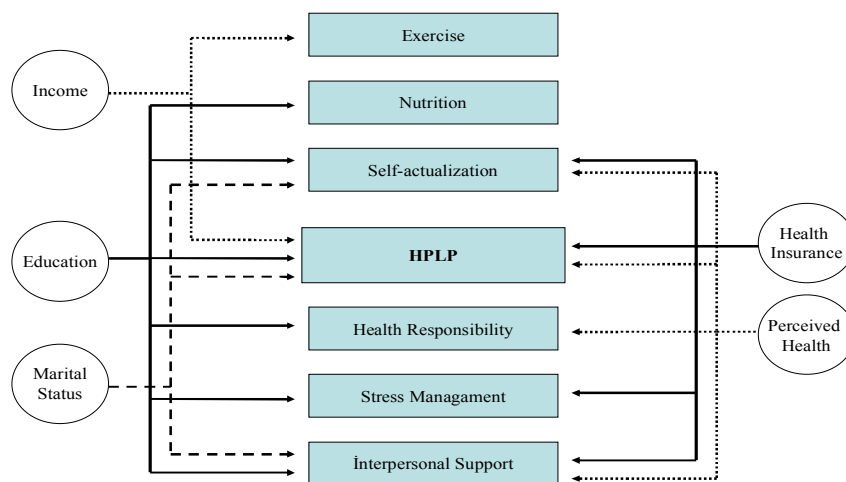


Figure 1. The Relation between Health Promoting Lifestyle Behaviours and Socio-demographics of Migrant Women

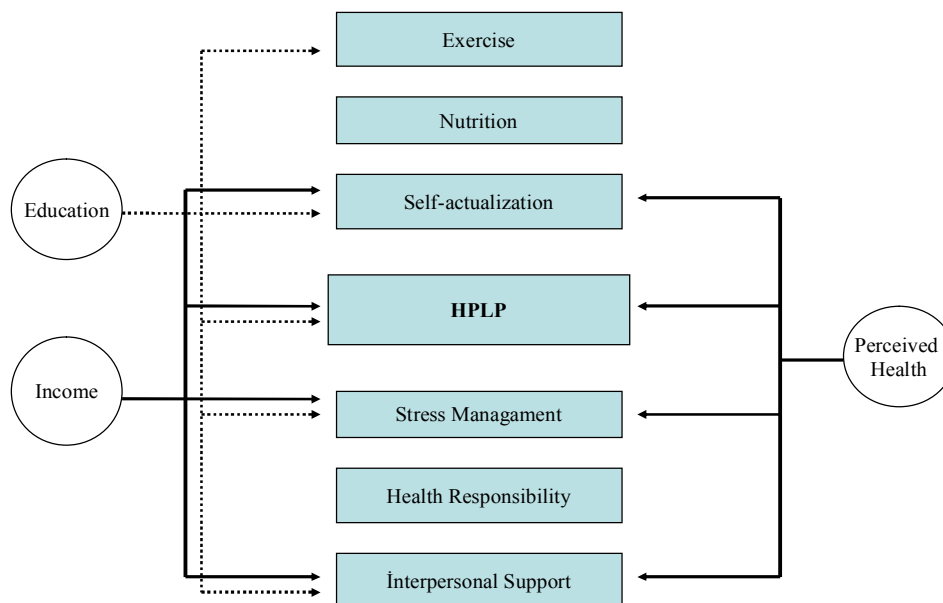


Figure 2. The Relation between Health Promoting Lifestyle Behaviours and Socio-demographics of Non-migrant Women

Discussion

In the present study there is a difference between migrant and non-migrant women's health promotion behaviours. The mean HPLP scores of the migrant and non-migrant women were 2.28 ± 0.28 and 2.43 ± 0.32 respectively (Table 1). Duffy et al. (1996) found Mexican-American women to have moderate HPLP scores and explained that health behaviours might vary from culture to culture. Al Ma'Aitah and Haddad (1999) also reported Jordanian women to have moderate HPLP scores (2.5 ± 0.37). The present study revealed that Turkish migrant and non-migrant women had lower HPLP scores than those reported from other studies (Ahijevych and Bernhard, 1994; Al Ma'Aitah and Haddad 1999; Duffy et al., 1996). It may be due to cultural differences. In addition, the participants of this study had lower education levels. In this study, we found a significant difference in mean HPLP scores between migrant and non-migrant women ($p < .01$). The migrant women had lower scores on HPLP than the non-migrant women. Migration affects many factors such as social, cultural and financial, all of which play a role in health and health behaviours. In fact, it is more important for migrants to find a job and to gain acceptance in the society than to take care of their health. The significant difference between the migrant and non-migrant women in their HPLP scores can be explained by the fact that the non-migrant women had a higher income and education and therefore a better perceived health status.

We found both migrant and non-migrant women to have moderate self-actualization scores. Unlike the present study, Johnson (2005), Duffy et al (1996) and Al Ma'Aitah and Haddad (1999) found African-American women, Mexican-American women and Jordanian women to have high self-actualization scores respectively. There was no significant difference in the mean self-actualization scores between migrant and non-migrant women ($p > .05$). Self-actualization is one of the most basic functions of humans and there is a direct relation between self-actualization and health status (Misra, Patel and Davis, 2000). In this study, the migrant women had a lower income and education. However, they were struggling to achieve their goals and were satisfied with the outcome of their struggle. This may explain their moderate self-actualization scores. Furthermore, whether migrant or non-migrant, the women have the same social status and are expected to fulfill similar duties. This may be reason for the insignificant difference in self-actualization scores between the migrant and non-migrant women.

In this study, health responsibility scores of both the migrant and non-migrant women were the second lowest scores of all subscales. The migrant women got significant lower scores on health responsibility than the non-migrant women ($p < .01$). If an individual's health status is under his internal locus of control, it means s/he takes his/her health serious (Delaney, 1994). In the present study, the participants got low health responsibility scores, consistent with the literature (Duffy et al., 1996; Pender et al., 1990; Tokgöz, 2002). Actually, they may not have found regular check-ups important for a healthy living. If an individual is not aware of his health problems, then he will not make an effort to promote his health (Delaney, 1994). Furthermore, the significant difference between the participants' health responsibility scores can be explained by the fact that non-migrant women had health insurance but migrant women

did not and that both groups of women had different levels of education and different culture.

The migrant and non-migrant women got the lowest scores on exercise, comparable with the literature (Ahijevych and Bernhard, 1994; Al Ma'Aitah and Haddad, 1999; Johnson, 2005). The difference in mean exercise scores between the migrant and non-migrant women was not significant ($p > .05$). In fact, women from developed countries consider jogging, weight lifting and swimming as exercise, while Turkish women consider such activities as going to school or work on foot and doing housework as exercise. Many studies reported that exercise behavior of Turkish women were insufficient (Altıparmak, Kutlu, 2009; Kitiş, Bilgili, Hisar & Ayaz, 2010; Tokgöz, 2002). Therefore, the participants may not have acknowledged that exercise was an important part of healthy living and did not do exercise.

In the present study, the women got low nutrition scores, which is consistent with the results of the studies by Ahijevych and Bernhard (1994) and Johnson (2005). It may be due to that financial difficulties affect nutrition and hinder adequate and balanced nutrition. The non-migrant women received higher nutrition scores than the migrant women, with a significant difference ($p < .01$). Sayan and Erci (1999) and Tokgöz (2002) reported the women to have moderate nutrition scores. It has been noted that migrant women could not have adequate and balanced nutrition due to financial difficulties and lack of knowledge and cultural nutritional habits and that they more frequently consumed food rich in fat and carbohydrates (Özen, 1996; Choudry, 1998). In Turkish culture, bread is one of the basic food substance. In addition, the migrant women were from the eastern part of Turkey and the non-migrant women were from Aegean region and therefore their nutrition habits were different. These differences may have caused the migrant women to get lower nutrition scores.

Both the migrant and non-migrant women got the highest scores on interpersonal support, with no significant difference between them. Ahijevych and Bernhard (1994) also found African-American women received the highest scores on interpersonal support. However, there have been other studies reporting the women to get the second highest scores on interpersonal support (Duffy et al. 1996; Johnson, 2005; Misra et al. 2000). Al Ma'Aitah and Haddad (1999) found Jordanian women to get lower scores on interpersonal support as opposed to expectations. In fact; Muslim culture places much importance to relationships between family members, friends and relatives. In the present study, there was not a significant difference in interpersonal support between the migrant and non-migrant women. It may be that the migrant women also had strong social support. Although the migrant women seemed not to have many friends and relatives where they moved, an overwhelming majority of the women (82.4%) noted that they had relatives and friends or were in contact with them.

We found the migrant women to get significant lower scores on stress management than the non-migrant women ($p < .01$). There have been other studies reporting that migrant women have lower stress management scores (Ahijevych and Bernhard, 1994, Johnson, 2005., Misra et al. 2000). It may be because migrant women face many stressors such as unemployment, lower social status, loneliness, language barriers and cultural differences and they cannot develop strong coping strategies.

There is a direct relation between age and the scores of self-actualization, interpersonal support and stress management and overall HPLP scores. In fact, Sayan and Erci (1999) noted that as age increased, health responsibility, exercise, nutrition, stress management and health promoting behaviour improved. However, Ahijevych and Bernhard (1994) in their study on migrant women reported a weak relation between age and health promoting behaviour. Although demographics such as age, education and marital status are considered factors modifying health in Health Promotion Model and have positive effects on health promoting behaviour, effects of demographics may vary from community to community and from culture to culture (Pender, 1987). Therefore, it is thought that older migrant women may have poorer health promoting behaviour. In the present study, we found older migrant women to have lower HPLP scores. This can be explained by individual and cultural characteristics of non-migrant women. The married migrant women were found to have significantly higher scores on self-actualization and interpersonal support and significantly higher HPLP scores than the divorced migrant women ($p < .01$). Nevertheless, Ahijevych and Bernhard (1994) did not find a significant difference between marital status and health promoting behaviour. We think that the married migrant women may have had new goals after marriage and social support from their husbands.

As migrant women have higher education levels, their HPLP scores increase. Sohng, Sohng and Yeom (2002) in their study on old Korean migrants found education increased the scores of self-actualization, health responsibility, and exercise and overall HPLP scores. Ahijevych and Bernhard (1994) in their study on migrant women found a weak relation between age and health promoting behaviour. Actually, education plays an important role in health behaviour. Education helps individuals to make decisions about their health and acquire positive health behaviours. According to Health Promoting Model, education improves health promoting behaviours. In this study, we also observed that both the migrant and non-migrant women with a higher education level took responsibility for their health, were in regular contact with their friends and relatives and recognized and coped with stressors more easily as they had individual goals and their awareness in health increased.

The migrant women with an income higher than their expenditures had high scores on both HPLP and its subscales. The non-migrant women with an income higher than their expenditures had significantly higher scores on the subscales of self-actualization, interpersonal support and stress management and HPLP overall. Sohng et al. (2002) also found old Korean migrants with higher income to receive higher scores on interpersonal support and exercise. It may be that higher income offers more opportunities for exercise and that migrant women start to consider exercise important for a healthy living and show more interest in health promoting behaviours. However, the non-migrant women have already higher incomes, more social opportunities, are less frequently exposed to financial stressors and it is easier for them to achieve their goals.

The women with a health insurance had significantly higher scores on the subscales of self-actualization, health responsibility and interpersonal support and HPLP scores overall ($p < .05$). In fact, having a health insurance has a positive influence on health status. The migrant women

with health insurance received better health care and shared their health problems with health professionals and this may have improved their health promotion behaviours. However, it has been reported in the literature that migrants do not have a health insurance and less frequently visit health centers (Özen, 1996).

The migrant women with a better perceived health status received significantly higher scores on the subscales of self-actualization, interpersonal support and stress management and HPLP overall ($p < 0.05$). Walker, Madeleine & Pender (1990) also reported that individuals with a positive perception of health status were more likely to acquire health promotion behaviours than those with a poor-very poor perceived health status. According to the Health Promotion Model, individuals have a perceived health status shaped by their own values and their perceived health status has either a positive or a negative influence on their health behaviours. It is known that feeling good can be a source of motivation for maintenance of good health. Perception of health refers to one's subjective evaluation of his health. Perception of health and illness has a strong influence on health behaviours. Therefore, perceived health status can be a source of motivation for improvement of health status and individuals with positive health status can make more effort to improve their health.

Conclusion

The migrant women had moderate HPLP scores, and lower than those of the non-migrant women. Migration is a chaotic process and may have a negative impact on health status and health behaviours. Therefore, health professionals, especially those responsible for the first-line health care services, should consider migrants at risk and make attempts to protect and promote their health. Nurses more likely to work with these individuals should develop health education programs and take account of cultural differences and variables likely to affect health behaviors when designing the programs.

References

- Ahijevych, K., & Bernhard, L. (1994). Health promoting behaviours of African American women. *Nursing Research*, 43 (2), 86-89.
- Akça, Ş. (1998). Assessment of Health promotion behaviors and confounding factors in instructor of university. Unpublished Master Thesis, Ege University The Institute of Health Sciences. Izmir, Turkey.
- Al Ma'Aitah, R., & Haddad, L. (1999). Health promotion behaviors of Jordanian women. *Health Care for Women International*, 20 (6), 533-539.
- Altınyelken, H. K. (2009). Migration and self-esteem: A qualitative study among internal migrant girls in Turkey. *Adolescence*, Spring, 44 (173), 149-163.
- Altıparmak, S., Kutlu, A. K. (2009). The healthy lifestyle behaviors of 15-49 age group women and affecting factors. *TAF Preventive Medicine Bulletin*, 8 (5), 421-426.
- Bayhan, V. (1996). Internal migration and anomalous urbanization in Turkey. II. National Sociology Congress Book. Ankara. State Institute of Statistics, 178-193.
- Choudry, U. K. (1998). Health promotion among immigrant women from India living in Canada. *Journal of Nursing Scholarship*, 30 (3), 269-274.
- Delaney, F. G. (1994). Nursing and health promotion: conceptual concerns. *Journal of Advanced Nursing*, 20, 828-835.
- Duffy, M., Rossow, R., & Hernandez, M. (1996). Correlates of health promotion activities in employed Mexican American women. *Nursing Research*, 45 (1), 18-24.

- Ertem, M. (1999). Migration and Infectious Disease. *Community and Physician*, 14 (3), 225-228.
- Higgins, P., & Learn, C. (1999). Health practices of adult Hispanic women. *Journal of Advanced Nursing*, 29 (5), 1105-1112.
- Hyman, L., & Gruge, S. (2002). A review of theory and health promotion strategies for new immigrant women. *Canadian Journal of Public Health*, 93 (3), 183-187.
- International Organization for Migration. (2004a). Glossary on migration. Retrived October 30, 2006 from <http://www.iom.int/jahia/Jahia/engineName/search/pid/6?matrix=1152793852045>
- International Organization for Migration. (2004b). Health and migration seminar report of meeting. Retrived October 30, 2006 from <http://www.iom.int/jahia/page8>
- İpekyüz, N. (1996). Internal migration discussions and health dimensions in South Eastern. *Community and Physician*, 11 (74), 56-60.
- Johnson, L. R. (2005). Gender differences in health-promoting lifestyles of African Americans. *Public Health Nursing*, 22 (2), 130-137.
- Kitiş, Y., Bilgili, N., Hisar, F., & Ayaz, S. (2010). Frequency and affecting factors of metabolic syndrome in women older than 20 years of age. *Anatolia Cardiology Journal*, 10, 111-119.
- Kızılcılık, S. (1996) A Study: Health conditions of people who migrated in Mersin II. National Sociology Congress Book. Ankara. State Institute of Statistics, 657-665.
- Kocaman, T., & Bayazit, S. (1993). Socio-economic circumstances of migratns and internal migrations in Turkey. State Planning Organization.
- Misra, R., Patel, T. G., Davies, D., & Russo, T. (2000). Health promotion behaviors of Gujurati Asian Indian immigrants in the United States. *Journal of Immigrant Health*, 2 (4), 223-231.
- Mutluer, M. (2003). İnternational migrations and Turkey. Çantay Bookshop, 9-34.
- Özen, S. (1996). Health problems nnd politics within Urbanization process. II. National Sociology Congress Book. Ankara. State Institute of Statistics, 623-628.
- Pender, N. J. (1987). Health promotion in nursing practice. Second Edition, USA.
- Pender, N. J., Walker, N. S., Sechrist, R. K., & Strombog, F. M. (1990). Predicting health– promoting lifestyles in the workplace. *Nursing Research*, 39 (6), 326-332.
- Pender, N., Barbauskas, V., & Hyman, L. (1992). Health promotion and disease prevention toward excellence in nursing practice and education. *Nursing Outlook*, 40 (3), 106-112.
- Rothenberg, R. B., Lobanov, A., Singh, K. B., & Stroh, G. (1985). Observations on the application of epi cluster survey methods for estimating disease incidence. *Bulletin of WHO*, 63 (1), 93-99.
- Sayan, A., & Erci, B. (1999). Assesment of health promoting behaviors and attitude between self-care relationships in working women. VII. National Nursing Congress (Congress Book). Erzurum. 22-24 June, 427-433.
- Sohng, Y. K., Sohng, S., & Yeom, H. A. (2002). Health-promoting behaviors of elderly Korean immigrants in the United States. *Public Health Nursing*, 19 (4), 294-300.
- Soyer, A. (1998). Cause of one research “utilization of medical service” and health center. *Community and Physician*, 13 (3), 362-363.
- State Institute of Statistics (2004). Census in 2000, Migration Statistics, 52.
- Topçu, S., & Beşer, A. (2006) Migration and health. *Journal of the Cumhuriyet University, Vocational School of Nursing*, 10 (3), 37-42.
- Walker, N. W., Madeleine, J. K., & Pender, N. J. (1990). A Spanish language version of the health promoting lifestyle profile. *Nursing Research*, 39 (5).
- Walker, S. N., & Hill-Polerecky, D. M. (1996). Psychometric evaluation of HPLP II. Unpublished Manuscript, University of Nebraska Medical Center.
- Walker, S. N., Sechrist, K. R., & Pender, N.J. (1987). The health–promoting lifestyle profile: Development and characteristics. *Nursing Research*, 36 (2).