Self-Care Activities, Barriers and Information Source among Rural and Urban Middle Aged Women

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Abstract

Introduction**:** Doings self-care activitiesincrease people's awareness, self-confidenceand improve their self-efficacy.Social factors such as place, culture, available resource, social support and economic status are affected health status.We hypnotized that self-care behavior between women lived in urban and rural setting is different, so, the study was developed to compare the self-care activities, barriers and information source between rural and urban middle aged women. Materials and Methods**:**This cross-sectional study was done on 366 women lived in urban and rural area. The data collection tools included a questionnaire of determinants of social health and aquestionnaire for evaluation of self-care activities and barriers.Data were analyzed through descriptive and inferential statistical tests by using SPSS version 13 software. P-value less than 0.05 were considered significant. Results**:**Rural population had lower educational level and the performance of self-care activities in urban population was more than rural women, especially activities which need to professional health care such as mammography, pap smear, etc. Eating fruits and vegetables had higher incidence in urban participants than rural women too.Conclusion:The findings of this research indicated that women especially in rural setting had low level of self-care activities and more barriers was noticeable. So, this make a concern, and increasing self-care activities is a big public health challenge for health managers.

Key words: Self-Care, Sources, Barrier, Middle Aged Women.

Introduction

Self-care is described as activities performed by people tomaintain health, relievesymptoms of the disease, andprevent from diseases (Barofsky, 1978).According to Orem'smodel, in the chronic disease, self-care can be an important component of treatment that people do on owns to conserve health, welfare andwell-being (White, 2013).Self-care activitiesincreasepeople's awareness, self-confidenceand

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improve their self-efficacy; so,individuals preserve a satisfactory and improved profession productivity and social familialinteractions (Zarandi et al., 2016).

Self-care has severalfactors, including experience, skill, motivation, culture, confidence, habits, function, cognition, support from others, and access to care (Riegel et al., 2012). On the other hand self-care has four components: management of healthy life-style, treatment of minor disease, management of long-time and chronic disease and caring fromout-patient; according to these components, self-care includes three components of primary health cares (Han et al., 2014).

Self-care for chronic diseases has recently been recommended as a acceptably effective method; It is mentioned thatself-care programs decrease emergency visits up to 40% and out-patient visits by 17% (Supporting people with long term conditions to... Self Care: a guide to developing local strategies and good practice, 2006). It is expected,in the self-care programs, patients become aware of their health status, know when they need care, and gain suitable knowledge regarding the necessity of treatment. Patients should be able to monitor their symptoms and refer in time for routine examinations without needing to refer to their physician (Sadeghi et al., 2013).The health personnel such as physicians, nurses, nutritionists, and pharmacists play animportant role in self-care (Carter et al., 2009).

In a meta-analysis that done by Glynn et al. in 2010,interventions included: self-monitoring, informative interventions directed by health personnels, and a systematic reminder of activities; the findingsindicated that self-blood pressure monitoring can lead to most noticeable decreases in systolic and diastolic blood pressures (Glynn et al., 2010). Sadeghi et al.in 2006, studied the effects of comprehensive self-care programs on increasing the knowledge, attitude, and treatment among patients with hypertension, the results of this research showed thatknowledge of patients about own treatment increased especially among patients who were above 40 years old; in this survey,at the beginning of the study, faithfulness to treatment diverse from 10% to 56%, while,after four years of involvement, adherence to treatment significantly increased and the participants increased their physical activity and ate on a healthy diet(Sadeghi et al., 2006).

The findings of researches showed that, surveys had more attention to the earlierand later ages of life than to the middle ages,while the study was performed on the United States national longitudinalstudy, the researcheroffered evidence that multidirectionality,variability, and plasticity in the nature and directionof changes in physical health, cognitive functioning, and well-being are happened at the middle age (Brim et al., 2004). Todays, mid-life is commonly associated with stress and crisis,many distress recourses normally associated with middle ages such as the empty nest syndrome, and menopausal transition have been presentedin this period of life time (Lachman, 2004). Life condition and social factors include place, culture, available resource, social support and economic status effect directly and indirectlyhealth status of individuals (Braveman & Gottlieb, 2014). A study was done by Eftekhar et al, on 2009, showed that 55%of participants mentioned that don't have any information about self-careand the findings of this study had highlighted the significant role of information in achievement to self-care activities (Eftekhar et al., 2009).

Based on the available data, no project has been conducted in Iran regarding to self-care and its correlation with social determinants of health in middle aged women. We hypnotized that self-care behavior between women lived in urban and rural setting is different, so, their health status are different. The current study is developed to comparethe self-care activities, barriers and information source between rural and urban middle aged women of East Azerbaijan.

Materials and Methods

Study Design and participants

This cross-sectional study was done to compare the self-careactivitis, barriers and information source of self-care in middle aged women. The study was carried outonmiddle aged women that lived inurban and rural area of East Azerbaijan (a province in the Northwest Iran) in 2017.
The ethics committee of Tabriz University of medical Science approved the study protocol, and the participants assigned a written informed consent at the time of study enrollment. Women aged 45-65 years old who did not have surgery in last three month and not using hormone replacement therapy for menopausal problems were chosen in this study.
Sample size was determined 366 (140 for rural women and 246 for urban women), consideringα=0.05, d=0.2 and self-careactivitis rate=45%, according to Eftekhar et al. study (Eftekhar et al., 2009).

Data collection

The data collection tools included the

1) questionnaire of determinants of social health that was developed by research team. The content validity was used to acquire the scientific validity of questionnaire. For this purpose, the questionnaire was given to 10 academic members of Tabriz University of

Medical Sciences to evaluate the content of questionnaire, after collecting their ideas, required changes were done and finally used for study purposes. For reliability of this questionnaire, the researcher used test-retest and Cronbach's α coefficient.

2) questionnaire for evaluation of self-care activitis, barriers and motivation among women according to questionnaire that used in England (Department of Health, 2005). This questionnaire validity and reliability was determined in Iran by Eftekhar et al. and its reliability determined 0.79 (Eftekhar et al., 2009).

Data collection had two steps: in the first step, one third of health centers were selected randomly (18 urban health center and 11 rural ones).In the second step women who came to the health center for receiving primary health services including annual middle age medical and paramedical checkup were selected randomly.

Data Analysis

Data were analyzed through descriptive and inferential statistical tests such as mean (Standard Deviation) by using SPSS (Statical Package for the Social Science) version 13 software. Inferential statistical tests were t-test and Chi-Square. In this study, P-value less than 0.05 were considered significant.

Results

The present study was conducted on 387 urban and rural menopause women from August to October 2017. The mean (SD) age of participants was 52.8 (7.8) years. Most of women (196 (50.5%)) had elementary or high school education, 136 (35.1%) of women were illiterate and just 55 (14.2%) of them had university degree. In this study, most of women were housewife (299 (77.1%))and all of them were married. Demographic characteristics of participants were summarized in table 1.

Table 1: Comparison of socio-demographic characteristics of urban and rural women

Socio-demographic information	Urban (n=247)	Rural (n=140)	P
age (year)*	52.3 (8.4)	53.4 (7.8)	0.206
BMI (kg/cm^2)*	28.1 (4.9)	26.3 (4.6)	<0.001
Employment status N (%)			
Housewife	167 (67.6)	132 (94.3)	
Having job	67 (27.1)	8 (5.7)	<0.001
Retired	13 (5.3)	0 (0)	
Education level N (%)			
Illiterate	61 (24.7)	75 (53.6)	
Primary-Secondary school	78 (31.6)	55 (39.3)	<0.001**
High school/college diploma	55 (22.3)	8 (5.7)	
University education	53 (21.5)	2 (1.4)	
Smoking N (%)	6 (2.4)	1 (0.7)	0.212**
Sufficiency of income N (%)			
Quite adequate	49 (19.8)	19 (13.6)	
Fairly adequate	151 (61.1)	85 (60.7)	0.082**
Inadequate	47 (19.0)	36 (25.7)	
High Blood Pressure N (%)	71 (28.7)	43 (30.0)	0.794**
Diabetes	41 (16.6)	17 (12.9)	0.238**
Mental disorders	83 (33.6)	24 (17.1)	0.001**
Skeletal pain	45 (18.2)	25 (17.9)	0.929**

*Mean (SD)

Over 90 percent of participants had at least one chronic disease including high blood pressure (58.7%), mental disorders (50.7%) and diabetes (29.5%).

Table 2 is shown information resource of self-care in the participants. The most of participants got information from family, television and doctors. The results of study showed that rural women got information from family less than urban women. Women who lived in urban setting got their information mostly from educational materials including web pages, books and poster

Table 2: Information sources of self- care in urban and rural areas

Information sources	Urban (n=246) N (%)	Rural (n=140) N (%)	P*
Family members	165 (66.8)	116 (82.9)	0.002
Family/ hospital doctor	144 (58.3)	88 (62.9)	0.193

pharmacist	51 (20.6)	22 (15.7)	0.029
Health programs on TV	185 (74.9)	100 (71.4)	0.062
Health web pages	90 (36.4)	21 (15.0)	<0.001
Health Books	86 (34.8)	24 (17.1)	<0.001
Health posters	61 (24.7)	27 (19.3)	0.003

*based on Chi-Square test

Table 3 shows self-carebehaviors that were performed by participants.

Table 3:Conducted self-care activities in urban and rural areas

Self-care activity	Urban (n=246) N(%)	Rural (n=140) N(%)	P
Drinking seven or more glass of water daily	47 (19.0)	19 (13.6)	0.070
Doing regular exercise*	117 (47.8)	118 (84.3)	<0.001
Cigarette smoking	6 (2.4)	1 (0.7)	0.212
Drinking alcohol	4 (1.6)	0(0.0)	0.164
Eating processed foods (including pizza, salami, Sausage)	103 (41.7)	76 (54.3)	0.026
Eating 3-5 portion of fruit/vegetables in a day	118 (47.8)	46 (32.9)	0.001
Doing at least one mammography during last threeyear	66 (26.7)	16 (11.4)	<0.001
Doing at least one Pap-smear during last three year	69 (27.9)	23 (16.4)	0.010

P-value was derived based on Chi-Square test
*three times in a week each time 30 minutes

Table 4. Barriers to self-care activities

Self-care activity	Urban (n=109) N(%)	Rural (n=89) N(%)	P*
Lack of money	67 (27.1)	66 (47.1)	<0.001
Lack of time	98 (39.7)	68 (48.6)	0.017
lack of specific equipment	99 (40.1)	84(60.0)	<0.001
Lack of encouragement by the doctors	70 (28.3)	32 (22.9)	0.001
Lack of interest	65 (26.3)	33 (23.6)	0.005
Lake of knowledge	102 (41.3)	54 (38.6)	0.027

Three most barriers in doing self-care activities that was mentioned by participants include lake of time (88.3%), lake of knowledge (37.7%) and lake of money (74.2%).

Discussion

This study was conducted on 366 middle aged rural and urban middle aged women for comparing self-care behaviors, information resources and barriers.

Rural participants had markedly lower education level and most of them were housewife.It's well known that, the level of education in suburban places is usually lower than urban areas (Gang et al., 2015).

All of chronic disease (including type 2 diabetes, hypertension, anxiety/depression and etc.) had higher prevalence among urban women. It is probable that higher prevalence of chronic disease in the cities is related to higher awareness of urban population about chronic disease and their systematic and regular screening, last one may be affected by income levelin the urban areas. This result is showed in Gang et al. study too (Gang et al., 2015).

In the present study the rate of musculoskeletal pain had not significant difference betweenurban and ruralwomen (P=0.929). While other comprehensive study conducted by Davatchi et al. on 2009 in Iran, showed that musculoskeletal pain in rural area is higher than urban, the reason of this mater mentioned that the occupation of most Iranian villagers, especially in small villages, is basically a agriculture, which is non-mechanized in some cases (Davatchi et al., 2009).

In this study most of rural women were illiterate, while the most of women in urban setting had diploma or university licenses. The level of education can affect self-care information resources and activities among population.

It is not surprising that, in the present "family members and doctors" were main information resource of rural women, while "internet and books" were among the most important health information resource of urban women.

According to Luoa et al. on 2015, they mentioned that self-care ability in women with high education level was better than women with low education level (Luoa et al., 2016). Thestudy was conducted by Geng et al. in 2009showed that income, education level and marriage statues can affect self-care capabilities (Geng et al., 2006).

According to our study findings, rural population had lower educational level andthe performance ofself-care activities in urban population wasmore thanrural women, especially activities which need to professional health care such as mammography, pap smear, etc.Eating fruits and vegetables had higher incidence in urban participants too.To our surprise majority of rural women made regular exercise. The deprivedawareness among rural women point outthat the most of them are not educated by their primary health care providers. This aspect highlights health managers to have programs to educate and encourage rural population in thesefields. Education through mass media such as TV can make a change in this field.

One of the most important barriers in rural section was lack of money, it seems that lower rate of doing mammography, pap smear and healthy eating had correlation with poverty. Poverty and having less money is mentioned as a barriers in self-care activities in Luoa et al. study too (Luoa et al., 2016).

This study had some limitations: First limitation is about low sample size of study and second limitation is the data on self-care were obtained from a self-report questionnaire, and therefore, recall bias was inevitable.

Conclusion

in rural setting had low level in some self-care activities and more barriers is noticable.So, this make a concern, and increasing self-care activities is a big public health challenge for health managers. Therefore, more struggle is needed to growth self-care behaviors and to warrant the quality of self-care.

Conflict of interest

The authors declare that have not any conflict of interest.

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