Preventive Health Care Practices of Former Soviet Union Immigrant Women in Germany and the United States

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Abstract:

Objectives: To examine the use of preventive health care practices of mammography, Pap smear, and breast self-exam in immigrant women from the former Soviet Union in Germany and the United States. Design: A descriptive cross-sectional exploratory study was used to examine the preventive health care practices of immigrant women in Germany and the United States. Sample: A convenience sample of 15 German immigrant women from the former Soviet Union were solicited from the Salztal Klinik in Germany and matched by age with 24 U.S. immigrant women from the former Soviet Union solicited from a community center for immigrants. Measurements: Data were collected using a demographic survey and the Language, Identity, and Behavior Acculturation Measure. Results: Significant differences were found between the German and U.S. immigrant groups in use of mammography ($\chi 2 = 8.069$, $df = 1$, $p < .005$) and Pap smear ($\chi 2 = 7.245$, $df = 1$, $p < .008$). Conclusion: The low use of mammography and Pap smear among German immigrant women may be related to differences in health care systems, age, and health beliefs. Further study is needed to determine the affects of age and health beliefs related to health promotion and disease prevention to better understand how to intervene and improve the health of immigrant women from the former Soviet Union.

Keywords:

Prevention | health promotion | cancer screening | women's health | immigrant women | nursing

Article:

Introduction and Significance

Global migration has generated an unparalleled amount of ethnic and cultural diversity in many countries during the past few decades. In the United States as well as in other countries, this

phenomenon has created challenges in delivery of health care services and nursing practice. Cultural competence has become an essential skill for health care providers as they service increasingly diverse populations. Populations migrate with experiences that make it difficult for them to understand and use health care services while health care providers are not familiar with the health problems they present and their difficulties maneuvering through a new health care system. Communication is essential when working with this population, and providing interpreters can help in establishing a culturally appropriate and ongoing relationship. In addition, health care providers need to understand trends in migration, processes of adaptation, risk, and resilience patterns, to develop interventions that are applicable for ethnic and cultural groups. The purpose of this study is to examine immigrant women from the former Soviet Union about their use of the preventive health care practices of mammography, Pap smears, and breast self-exam in Germany and the United States in order to provide culturally appropriate health care services.

Both Germany and the United States have been experiencing growth in immigrant populations. The number of immigrants from the former Soviet Union (FSU) increased substantially in both countries after the collapse of the Soviet Union in 1989. From 1990 to 1997, the number of immigrants from the FSU in the United States exceeded the number from other countries (Schmidley & Gibson, 1999; U.S. Department of Commerce, 1999; U.S. Department of Justice, Immigration, and Naturalization Service, 1997). Between 1990 and 1999, 1.63 million ethnic Germans and 120,000 Jewish immigrants migrated from the FSU to Germany (Dietz, 2000). These numbers do not take into account the ethnic Russians who migrated to Germany seeking asylum (Hendrickson & Scholnick, 2005). Between 2003 and 2005, Germany resettled more than 200,000 traditional Russian-speaking Jews, which was more than the State of Israel resettled in the same time period (Harris, 2005). Many studies have been conducted on the effects of assimilation into American and German cultures. In the United States, assimilation and acculturation have been found to be a slow stressful process that takes generations to complete with adverse impacts on health status (Faragallah, 1997; Rumbaut, 1997). In Germany, there has been segmented assimilation, with Jewish immigrants assimilating into Jewish communities and ethnic Germans assimilating into ethnic German minority enclaves (Dietz, 2000). The health status of immigrants from the FSU to Germany has been found to be poorer than that of national Germans the longer they were in Germany (Ronnellenfitsch & Razum, 2004).

Immigrant women from the Soviet Union in Germany and Russia have similar cultural and health belief practices. The women in both samples lived in Russian subcommunities where most of their contacts were with other Russian immigrants and Russian was the spoken language. As for health belief practices, both groups expressed use of herbal remedies before seeking health care and shared their lack of understanding of the need for preventive care (personal communication, 2005).

German and U.S. Health Care Systems

Germany and the United States have different health care systems and this may account for the health status of their immigrant populations. In 2007, Germany reformed the health insurance program (Aris, 2003; Germany Guide, 2008), and health insurance is now mandatory for all. There are two parallel forms of insurance, state health insurance and private health insurance. Contributions to both forms of insurance are split 50-50 between employers and employees. Everyone in Germany can join the state insurance program, but only a few people are allowed to be in the private health insurance program, based on income and other factors. The state health insurance program is for those whose gross income is approximately $72,000 (2006 dollars) or less, students, people on internships, pensioners, and the unemployed. People making more than $72,000 can opt out of the state plan and choose a private insurance program, which offers more extensive coverage. The coverage includes a private/semiprivate room in a hospital, alternative therapies such as acupuncture and herbal treatments, glasses and contact lenses, and other treatments not available to those in the state health insurance program.

Among the services covered by the German state health insurance plan are prevention and early detection of certain diseases. However, those in the private health insurance programs receive more prevention options than those in the German state health insurance plan because some of the prevention options cost more than the state health insurance covers (Stock, Redaelli, & Lauterbach, 2006). The biggest advantage of the state health insurance program is that it insures family members at no additional cost.

Since 1971, all women 20 years and older in Germany have been able to receive a Pap smear paid for by their insurance plan, a yearly gynecological exam, and after the age of 30, inspection, palpation of the breasts, and instructions on breast self-exam (Klug, Hetzer, & Blettner, 2005). One of the major concerns with the state insurance program, however, is a lack of screening facilities for early detection of breast cancer, making Germany fall behind European standards (Grant, 2008). Germany did not have a population-based mammography screening program until January 2003. Prior to 2003, mammography was mainly used for diagnosing a suspicious lump in a breast (Tuffs, 2001). Since 2003, women 50 to 69 years of age have been covered for mammography screening every 2 years (Klug et al., 2005). In 2002, breast cancer was the most common cancer in Germany, affecting women at a rate of 67.5 per 100,000 women (World Health Organization, 2008).

In the United States, insurance coverage can be classified as public and private. Public insurance refers to plans that are subsidized by the federal and state governments (i.e., Medicare, Medicaid, Tri Care). Private insurance refers to those purchased by employers for employees or purchased directly by individuals from insurance carriers. Public insurance is available for those 65 years of age and older, those with disabilities, and those at certain levels of the federal poverty level. Although there is public and private insurance in the United States, the number of uninsured individuals continues to grow. In 2007, 45.7 million, or 15.3% of the population, were uninsured (Greenstein, Parrott, & Sherman, 2008). Both the public and private insurance plans cover mammography screening every 2 years for women 40 years of age and older and Pap smears

every 3 years for women 18 years of age and older. Breast cancer is the second leading cause of cancer deaths in U.S. women today. The incidence rate for women of all races in the United States developing breast cancer is 127.8 per 100,000 women. According to the Healthy People baseline for 1998, 79% of women 18 years and older received a Pap smear within the last 3 years and 59% of women 40 years of age and older in 1994 received a mammogram within 2 years (U.S. Department of Health and Human Services, 2000). The Healthy People 2010 objectives have set the target of 90% of women 18 years and older receiving a pap smear within 3 years and 70% of all women 40 years and older receiving a mammogram within 2 years (U.S. Department of Health and Human Services, 2000).

Literature Review

Studies in the United States With FSU Immigrants

Only a few studies have examined the health care practices of FSU immigrant women in the United States. Studies in the United States found that FSU immigrant women did not have blood pressure and cholesterol screening, Pap smears or mammography, or perform breast self-exam (Duncan & Simmons, 1996). Ivanov and Buck (2002) also found that women from the FSU relied on their physicians to refer them for health promotion services and provide health education. They did not practice breast self-examination or receive timely Pap smears or mammograms because they were not told to do this by their physicians. When ill, they used massage, teas, and herbal remedies they were familiar with before seeking health care services. Other studies found similar results. Lipson, Weinstein, Gladstone, and Sarnoff (2003) found that immigrants from the FSU typically do not get annual Pap smears, mammograms, or practice breast self-exam but rely first on herbal remedies. The Slavic Community Health Survey conducted by the Spokane Regional Health District Assessment/Epidemiology Center (2005) found that only 29% of women from the FSU reported ever having had a Pap smear.

Studies in Germany With Women

No studies were found examining immigrant women from the FSU in Germany and their health care practices. However, studies conducted with German women on their health care practices found that 84% considered themselves well informed about breast cancer and this information was received from their gynecologists (Klug et al., 2005). Of these women, 43% conducted breast self examination every month, and 62% of the women more than 50 years of age had a mammogram, 18% less than 30 years of age had their first mammogram, and 32.2% were between 30 and 39 years when they had their first mammogram. Age at first mammogram was associated with social class, with 75% of upper class women having a mammogram at 40 years of age compared with 56% of middle class and 60% of lower class. Age at first Pap smear was also associated with social class ($p < .001$). Other studies have found similar results (Becker, 2003; Lostao, Joiner, & Pettit, 2001; Siebert et al., 2006). These findings raise concerns because starting at the age of 20 years, women in Germany can receive a Pap smear and a gynecological

examination, and at age 30 years they can receive inspection and palpation of breasts along with instructions on breast selfexam, paid for by the state insurance plan. Only 56.5% of women take advantage of this preventive service.

Method

Design and Sample

A descriptive cross-sectional exploratory study was used to examine immigrant women from the FSU with regard preventive health care practices in Germany and the United States. Human subjects approval was obtained from the University of North Carolina at Greensboro and the Salztal Klinik in Germany. The U.S. sample was a convenience sample of FSU immigrant women 18 years and older solicited from a community center for immigrants. The German sample was also a convenience sample of FSU immigrant women solicited from the Salztal Klinik where they obtained health care. The Klinik is a Holistic Orthopedics clinic where people come for a wide range of treatments for illnesses such as arthritis, rheumatology, diabetes, and obesity. The services provided include traditional medical services, physical therapy, and alternative therapies. The 15 FSU immigrant women in the German sample were matched by age with 24 FSU immigrant women in the United States to constitute a total of 39 participants.

Data Collection

The women at both sites were asked to complete the Demographic Information for Immigrants from the Former Soviet Union Survey (DIFSU) and the Language, Identity, and Behavior Acculturation Measure (LIB; Birman & Tyler, 1994). The surveys were self-administered, taking about 30 minutes to complete. The DIFSU collects basic demographic information from participants. It was developed in English, translated into Russian, and then back-translated into English; conceptual agreement was obtained by two individuals fluent in both English and Russian. Because Russian was the major spoken and written language in all of the former Soviet Republics, all DIFSU surveys given to immigrant women in Germany and the United States were in Russian. The LIB has been previously translated into Russian and used numerous times with the Russian population.

Instruments

The DIFSU collected data on use of the preventive services of mammography and Pap smear along with the health promotion behavior of breast self examination and perceived health status. The LIB contains six subscales that measure acculturation as English/German Language proficiency (speaking and understanding English/German), American/German or Russian Identity, and American/German or Russian Behavior. Responses for the subscales range from 1, not at all, to 4, very well or very much. Examples of items on the scale include the following: “How would you rate your ability to speak English/German on the phone?” “I think of myself as being American/German” and “How much do you read American/German books, newspapers, or

magazines?" Mean scores for each subscale were used in the analysis, with higher mean scores indicating greater acculturation. The LIB scale has been tested for reliability with Cronbach's alpha coefficients ranging from .90 to .95 for language, .67 to .90 for identity, and .77 to .85 for behavior (Birman & Tyler, 1994).

Healthy People 2010 for various age-groups were used to determine use of mammography and Pap smear; women 18 years and older should receive a Pap smear every 3 years, women 40 years of age and older should receive a mammogram every 2 years (U.S. Department of Health and Human Services, 2000). The American Cancer Society has changed the recommendation for breast self-exam to occasionally or not at all (American Cancer Society, 2003). However, in this study, breast self-exam was measured as monthly. Health status was measured as perceived good/excellent health and poor/fair health.

Data Analysis

Descriptive statistics were used to determine demographics, use of preventive services, health promotion behaviors, and acculturation by either American or German immigrant women. Chi-square analysis and the Mann–Whitney test were used to examine the differences between the two immigrant groups on demographic characteristics, health practices, and acculturation. All analyses were conducted using SPSS 15.0.

Results

The age range of women in both groups was 26 to 58 years (Table 1). The length of time that immigrant women had been in the United States ranged from 3 months to 15 years, with 50% in the United States 3 years or less; the range in Germany was from 8 months to 18 years, with 50% there 6 years or less. Among the U.S. immigrant group, 4.2% of the women identified their ethnicity as Belarusian, 54.2% as Russian, 12.5% as Ukrainian, 20.8% as Jewish, and 4.2% as Azerbaijan. In comparison, 40.0% of the German immigrant group identified themselves as Russian, 6.7% as Ukrainian, 6.7% as Jewish, and 46.7% as German ($\chi 2 = 19.223$, $df = 5$, $p < .05$). As for religious affiliation, 37.5% of the U.S. immigrant group identified themselves as Jewish, 4.2% as Pentecostal, 16.7% as none, 4.2% as Christian, and 37.5% as Orthodox. Among the German immigrant group, 6.7% identified themselves as Jewish, 6.7% as Pentecostal, 20.0% as none, 13.3% as Christian, and 6.7% as Orthodox. As for education, 30.4% of the U.S. immigrant group had a vocational education and 69.6% had a college or institute education. In comparison, 33.3% of the German immigrant group had vocational education and 40.0% had college or institute education ($\chi 2 = 7.528$, $df = 3$, $p < .05$; Table 1). Thirty-three percent of U.S. immigrant women considered themselves to be in poor or fair health, as compared with 85.7% of the German immigrant women; 88.9% of the American immigrant women considered themselves to be in good or excellent health as compared with 14.3% of German immigrant women ($\chi 2 = 9.731$, $df = 1$, $p < .05$). In the U.S. immigrant group, there were no main medical illnesses. However,

the German immigrant group identified diabetes (20.0%; $\chi 2 = 2.51$, df = 1, $p > .05$), heart disease (13.3%; $\chi 2 = 1.09$, df = 1, $p > .05$), and hypertension (60.0%; 2= 15.01, df = 1, $p < .01$) as their major medical illnesses (Table 2). As for mammography, 69.2% of the U.S. immigrant women said they had a mammogram within 2 years whereas only 10.0% of German immigrant women had done so ($\chi 2 = 8.069$, df = 1, $p < .05$); 70.8% of U.S. immigrant women had a Pap smear within 3 years whereas only 26.7% of German immigrant women had ($\chi 2 = 7.245$, df = 1, $p < .05$); and 39.1% of U.S. immigrant women said they conducted breast selfexamination at least monthly whereas only 9.1% of German immigrant women did ($\chi 2 = 3.24$, df = 1, $p > .05$).

The Mann–Whitney test was used to determine if there was a difference between the U.S. and German immigrants groups' acculturation scores and their age, length of time in the United States or Germany, health status, use of mammography, Pap smear, and breast self-examination (Table 3). German immigrant women were significantly older than U.S. immigrant women ($U = 94.50$, $p < .05$); U.S. immigrant women were significantly more likely to have a timely mammogram ($U = 26.50$, $p < .05$) and a Pap smear ($U = 100.50$, $p < .05$), and more likely to perceive their health status as good or excellent ($U = 80.00$, $p < .05$). There was no significant difference in the scores on the six acculturation subscales between U.S. immigrant women and German immigrant women (Table 4).

TABLES 1-4 ARE OMITTED FROM THIS FORMATTED DOCUMENT

Discussion

These findings point to differences between German/Russian and U.S./Russian women in use of preventive services. Although Germany has a comprehensive health care system that covers all residents, preventive services such as mammography were not offered until 2003. This may account for the significantly low use of mammography among German/Russian women as they are accustomed to receiving mammography for diagnostic purposes rather than for screening purposes. The low use of other preventive services in Germany such as Pap smears and breast self-exam may be related to the low priority for preventive health behaviors among women from the FSU (Remennick, 2003). In the United States, preventive services of mammography and Pap smears are covered by insurance and have been recognized as important preventive services by women. German immigrants were older than U.S. immigrants, and Remennick (2003) found that many older women believed that breast cancer and cervical cancer were a young women's disease. Tejeda, Thompson, Coronado, and Martin (2009) found similar results when studying women in the United States with regard to education plus the perception that mammography is painful and a fear of the cancer diagnosis. U.S. immigrant women were higher educated, which may explain their use of preventive services. Edwards, Li, Pike, and Kolonel (2009) in studying ethnic differences in the use of mammography among women in the United States also found

mammography lowest for women who had a high school education or less and those who were older. German women reported significantly more hypertension, diabetes, and heart disease, which may explain why they identified themselves as in fair or poor health more so than the U.S. immigrant women. Although all German residents have health care coverage, an emphasis on disease prevention and health promotion related to breast cancer is only beginning. In the United States, health care policies are currently being considered that move the health care system toward a universal health care system. Any movement toward such a health care system must keep health promotion and disease prevention as its cornerstone. Otherwise, attempts to expand services to a broader population and to cut health care costs will in the end cost the health care system in increased morbidity and mortality.

Limitations

This study used a small and convenient sample, which would limit generalizability of the findings to the target population of immigrant women from the FSU. Small sample size could also lead to Type II error. However, in spite of these limitations, the study provides important information on an ethnic population that is growing in both the United States and Germany. Future studies with this population should include larger samples with broader geographic coverage to include multiple sites. Assessing for risk factors and their beliefs related to health promotion and disease prevention will help better understand how to intervene and improve the health of immigrant women from the former Soviet Union.

Conclusion

Breast cancer is among the leading causes of death among women in the United States and Germany. The results of this study highlight a group of women in need of interventions to help them understand the value of cancer prevention behaviors. Minimal interventions in both countries could include providing health literature focused on breast health and cervical cancer at physicians' offices and clinics in the Russian language, translators available who understand medical terminology at physician offices and clinics, and mailed reminders for obtaining mammography in the Russian language could be sent to immigrant women's homes. Preventive health behaviors are learned behaviors that can be changed with interventions that minimize barriers and assist immigrants to understand the life saving value of prevention and health promotion activities.

Declaration of Conflicting Interests

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