# Knowledge and Practices of Genital Hygiene: Visual-Disabled Women Sample\*

Beril Nisa YAŞAR\*\*, Füsun TERZİOĞLU\*\*\*, Gülten KOÇ\*\*\*\*

#### Abstract

**Background:** It is important to determine knowledge and practices of genital hygiene of visual-disabled women for primary and secondary health care. **Objectives:** It is aimed to determine that knowledge and practices of genital hygiene of visual-disabled women in this study. **Methods:** Interviewing method with 84 visual-disabled women who are the members of Altı Nokta Körler Derneği was used. The data were collected using a questionnaire form covering sociodemographic information as well as knowledge and practices on genital hygiene issues between May, 2013 and April, 2015. **Results:** 52.4% of visual-disabled women did not receive information about genital hygiene; 32% received information about perineal cleaning; 33.4% received information about menstrual hygiene; 34.6% received information about vaginal discharge; 49.5% had not regular menstrual periods; 38.1% had scented vaginal discharge; 38.1% had urinary tract infection; 79.8% did not go to a doctor periodically; 33.3% cleaned perineal area towards to back; 44% changed pad twice a day; 61.9% did not take shower during menstruation; 42% changed underwear two days or over; and 35.7% took vaginal douching. **Conclusion:** It is determined that visual-disabled women have a lack of knowledge of genital hygiene and their personal hygiene practices should be developed.

Key words: Visual-disabled, Genital Hygiene, Women, Nursing.

### Öz

# Genital Hijyen Bilgi ve Uygulamaları: Görme Engelli Kadınlar Örneği

Giriş: Görme engelli kadınların genital hijyen bilgi ve uygulamalarının belirlenmesi koruyucu ve tedavi edici sağlık hizmetleri açısından önemlidir. Amaç: Bu çalışmada görme engelli kadınların genital hijyen bilgi ve uygulamalarını belirlenmek amaçlanmıştır. Yöntem: Altı Nokta Körler Derneği Genel Merkezi'ne üye olan 84 görme engelli kadın ile yüz yüze görüşme yöntemi kullanılmıştır. Veriler, sosyodemografik özellikler ve genital hijyen bilgi-uygulamaları konularını içeren bir anket formu ile Mayıs 2013-Nisan 2014 tarihleri arasında toplanmıştır. Bulgular: Görme engelli kadınların %52.4'ünün genital hijyen konusunda bilgi almadıkları; %32'sinin perine temizliği, %33.4'ünün menstrual hijyen, %34.6'sının vajinal akıntı konusunda bilgi aldıkları; %49.5'inin düzenli olarak menstruasyon görmediği, %38.1'inin kokulu vajinal akıntısının olduğu; %38.1'inin üriner sistem enfeksiyonu yaşadığı, %79.8'inin belirli aralıklarla doktora gitmediği; %33.3'ünün önden arkaya doğru perinesini temizlediği, %44'ünün pedi günde iki kez değiştirdiği; %61.9'unun menstruasyon döneminde duş almadığı; %42'sinin iki gün ve üzerinde iç çamaşırını değiştirdiği ve %35.7'sinin vajinal duş yaptığı belirlenmiştir. Sonuç: Görme engelli kadınların genital hijyen bilgi ve uygulamalarında eksikliklerin olduğu ve kişisel hijyen uygulamalarının geliştirilmesi gerektiği belirlenmiştir.

Anahtar Sözcükler: Görme Engelli, Genital Hijyen, Kadın, Hemşirelik.

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ccording to World Health Organization (WHO) (2004), one billion people have disabled problems and 28.5% of them are visual-disabled people (39 million blind, 246 million have low vision) in the world. 12.3% of the population consist of disabled people (T. C. Başbakanlık Devlet İstatistik Enstitüsü Başkanlığı, 2009) and 8.4% of them are visual-disabled people in Turkey (Türkiye İstatistik Kurumu, 2011). 25.4% of visual-disabled people are women (Türkiye İstatistik Kurumu, 2011).

The visual-disabled women have some difficulties obtaining access to information, especially regarding reproductive and sexual health, as they require a different approach (Cavalcante, Barbosa, Oliveira, Almeida Rebouças and Pagliuca, 2013; Kassa, Luck, Bekele and Riedel-Heller, 2016; Van Rooy et al., 2012). Although there are current studies about all disabled groups on reproductive health (Becker, Stuifbergen and Tinkle, 1997; Charlifue, Gerhart, Menter, Whiteneck and Manley, 1992; Gomez, Carlson and Van Dooren, 2012; Kallianes and Rubenfeld, 1997; Mall and Swartz, 2012; Nosek, Hughes, Swedlund, Taylor and Swank, 2003; Smith, Murray, Yousafzai and Kasonka, 2004), the number of articles is limited about visual-disabled people (Costa, Pagliuca, Almeida, Cardoso and Rebouças, 2009; Duckett and Pratt, 2001; Hayes 1999; Saulo, Walakira and Darj, 2012). Costa et. al. (2009) determined that nurses need to develop verbal communication abilities for visual-disabled people. Duckett and Pratt (2001) suggested that we need to researches about visual-disabled people; Hayes (1999) emphasized that an almost complete absence of appropriate information about sexual health for visual-disabled people. Saulo et al. (2012) indicated that there is a need for alternative methods for voluntary counseling and testing for visual-disabled people. In general, the studies related to visual-disabled women have found that experience difficulties getting care, challenges accessing healthcare facilities, perceptions that health professionals are insensitive to their needs, and concerns about the quality of care they receive (Schopp, Sanford, Hagglund, Gay, and Coatney, 2002; Sharts-Hopko, Smeltzer, Ott, Zimmerman and Duffin, 2010). These studies highlight the importance of limited information sharing on the part of health professionals about visual-disabled women.

Nosek et al. (2003) stated that scientific studies are enough for disabled people in both America and Europe. Data is inadequate when it is evaluated in terms of visual-disabled women (Abou-Gareeb, Lewallen, Bassett and Courtright, 2001). It is too hard to find current and safety data on disabled people in Turkey.

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Little is known about health practices of visual-disabled women and it is important to understand visual-disabled women for nurses (Czerwinski, 2000). Nurses have a key role to give consultancy and service to protect and promote the health of visual-disabled women. Evidence from qualitative studies showed that the health care needs of women with visual disabilities have not been adequately met in many parts of the world (Murthy, John and Sagar, 2014). The objective of this study is to determine knowledge and practices about the genital hygiene of visual-disabled women.

Research Questions

- 1. What is the knowledge about genital hygiene in visual-disabled women?
- 2. What is the practices about genital hygiene in visual-disabled women?

#### Methods

#### Research Design

This study was conducted to determine knowledge-practices of genital hygiene of visual-disabled women as a descriptive study in the Central Office of Altı Nokta Körler Derneği in Ankara. The research has included 335 members of Altı Nokta Körler Derneği.

#### Research Sample

Questionnaire was applied to 10 visual-disabled women and as the result of the power analysis revealed that 84 visual-disabled women were included in the research. The average age of the women in this study was 36.4±9.5 years (range 31–40).

#### Data Collection Instruments

The data were collected using a questionnaire covering sociodemographic variables as well as knowledge and practices on genital hygiene issues. The questionnaire developed by the researchers was used in data collection in accordance with the literature (Czerwinski, 2000; Klebanoff et al., 2010; Sharts-Hopko et al., 2010). In the first section of the form, there were nine questions about sociodemographic information (age, educational status, the existing time of disabled, marital status, working status, types of home and family, health insurance and expenditure-income relation). In the second section of the form, there were 29 questions about genital hygiene (perineal cleaning, taking shower, washing hands using before/after bathroom, habits of underwear, vaginal discharge, menstruation, urinary tract infection etc.). A pilot study was completed for 10 visual-disabled women in order to determine the clarity of the questionnaire form, and unclear questions were updated by the researchers. The interviewing method was used to collect data between May, 2013 and April, 2014. The researcher read the data gathering form for them and their statements were written one by one. Answering the questionnaire took approximately 30-45 minutes.

### Data Analysis

The data coding and evaluation were performed by the researchers using a computer. Statistical analyses were performed using IBM SPSS Statistics 18.0 (Chicago, ILL, USA) software. In the study, the independent variables were sociodemographic variables (age, educational status, marital status etc) the dependent variables were related to knowledge and practices about genital hygiene (source of knowledge about genital issues, personal hygiene issues and go to a doctor periodically etc.). Descriptive statistics was used in the analysis of the data collected (percentage number, average, median, standard deviation).

### **Ethical Consideration**

The researchers obtained written permission to conduct the study from the ethics committee of the Hacettepe University Non-Interventional Clinical Research Ethics Board (GO 13/282-48). All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. Informed consent was obtained from all individual participants included in the study.

#### Results

In this study, 45.2% of the visual-disabled women were between at the ages of 31-40 years, 50% were graduated from secondary school, 57.1% were single, 82.1% were nonemployed, 84.5% lived in nuclear family, 89.3% lived in apartment, 85.7% had health insurance, 72.6% perceived the income less than expenditure and 60.7% had visual-disabled health problem congenitally (Table 1).

In the study, 52.4% of the visual-disabled women did not receive information about genital hygiene; 32% received information about perineal cleaning; 33.4% received information about menstruation; 34.6% received information about vaginal discharge. Of them, 48% did not speak where/who received information about perineal cleaning, menstruation, and vaginal discharge; 55.9% did not speak of whom want to receive information about above-stated problems (Table 2).

Table 1. Personal Characteristics of Visual-Disabled Women

Personal characteristics of visual-disabled women  Age (year)	n	0/0
Under 30	22	26.2
31-40	38	45.2
41-50	16	19.0
50 and above	8	9.6
$\chi = 36.4 \pm 9.5$	0	7.0
Educational Status		
Illiterate	13	15.5
Literate	19	22.6
Primary school	13	15.5
Secondary school	10	11.9
High school	20	23.8
University	9	10.7
Marital Status		
Single	48	57.1
Married	36	42.9
Working Status	<u> </u>	
Employee	15	17.9
Nonemployee	69	82.1
Types of Family		
Nuclear family	71	84.5
Extended family	8	9.5
Alone	5	6.0
Types of House		
Apartment	75	89.3
Shanty house	9	10.7
Health insurance		
Yes	72	85.7
No	12	14.3
Perceived income statue		
Less than expenditure	61	72.6
Equal with expenditure	23	27.4
Existing time of visual-disabled		
Congenital	51	60.7
Acquired*	33	39.3
Total	84	100.0
*After an illness/pregnancy/labor		
Table 2. Knowledge about Genital Hygiene of Visual-Disabled Women		
Knowledge about genital hygiene of visual-disabled women	n	%
Have you ever been informed of genital hygiene (n=84)		
Yes	40	47.6
No	44	52.4
Received the information about (n=84)*		
Perineal Cleaning	40	32.0
Menstruation	41	33.4
Vaginal Discharge	43	34.6
Received information resources from (n=40)		
Mother	23	27.4
Friend	16	19.0
Other **	4	4.8
No answer	41	48.0
Resource that they want to learn (n=84)		
Health professional	32	38.1
Other ***	5	6.0
No answer	47	55.9
Total		100
*Decade substitution in the contract of the co	14 1 1 4-1	

<sup>\*</sup>People who both receive and do not receive knowledge give more than one answer. It has been taken over per cent.

<sup>\*\*</sup> Teacher, Health professional, Radio, Book

<sup>\*\*\*</sup> Friend, Book, TV

In the study, 49.5% of visual-disabled women, had regular menstrual periods, 38.1% had scented vaginal discharge, 38.1% had urinary tract infection; 13.1% have still that infection, 7% had to itch on reproductive organs, 2.4% have still itching, 79.8% did not go to a doctor periodically (Table 3).

Table 3. Some Information of Genital Health of Visual-Disabled Women

Some information about genital health	n	%
Did you have regular menstrual periods?		
Yes	50	59.5
No	34	49.5
Did you have vaginal discharge scented before?		
Yes	32	38.1
No	52	61.9
Do you have vaginal discharge scented discharge now?		
Yes	32	38.1
No	52	61.9
Did you have urinary tract infection* before?		
Yes	32	38.1
No	52	61.9
Do you have urinary tract infection* now?		
Yes	11	13.1
No	73	86.9
Did you have to itch on reproductive organs before?		
Yes	9	10.7
No	75	89.3
Do you have to itch on reproductive organs now?		
Yes	2	2.4
No	82	97.6
Do you go to a doctor periodically?		
Yes	17	20.2
No	67	79.8
*To have any main haming and itahing when aningting		

<sup>\*</sup>To have any pain burning and itching when urinating

In the study, 61.9% of visual-disabled women, took shower twice-third times a week, 63.1% took shower by sitting, 82.1% washed hands after using the bathroom, 79.8% used water and toilet paper to clean perineal area, 33.3% cleaned perineal area towards to back, 95.2% dried perineal area after washing, 78.6% dried genital area by using toilet paper, 47.6% used razor to clean genital area, 94% used pad during menstruation, 44% changed pad twice in a day, 82.1% did not use daily pad, 61.9% did not take shower during menstruation, 20.2% took shower by sitting during menstruation, 50% changed underwear after two days or more, 52.4% used colorful and synthetic underwear, 35.7% took vaginal douching after sexual activity or perineal cleaning, 97.6% did not use feminine hygiene products (Table 4).

Table 4. Practices of Genital and Personal Hygiene of Visual-Disabled Women

Practices of genital and personal hygiene of visual-disabled women	n	%
Time of taking shower		
Twice-third times a week	52	61.9
Once a week	22	26.2
Once a day	10	11.9
Position of taking shower		
Sitting	53	63.1
Standing	21	25.0
Sometimes sitting and standing	10	11.9
Time of washing hands in perineal cleaning		
After using bathroom	69	82.1
Before and after using bathroom	13	15.5
Before using bathroom	2	2.4
The used material to clean perineal area *		
Water and toilet paper	67	79.8
Water only	15	17.9
Cloth	2	2.4

Type of perineal area cleaning		n	%	
Repeating towards back         25 0           Towards the front         19 22.6           Ckaning vulva and anus separately         10 11.9           Randomly         6 7.2           Drying after washing perineal area         80 95.2           No         4 4 48           Toilet paper         66 78.6           Cloth         10 11.9           Sometimes toilet paper and sometimes cloth         4 4.7           Toilet paper         4 4.7           No answer         4 4.7           Type of cleaning hairs on genital area*         4 4.7           Wax         34 40.5           Razor         40 47.6           Cream         4 4.8           Polator         3 3.6           Gloves         3 3.6           Gl	Type of perineal area cleaning			
Towards the front         19         2.26           Cleaning valva and anus separately         6         7.2           Drying after washing perineal area         8         95.2           Yes         80         95.2           No         4         4.8           The used material for drying the perineal area         66         78.6           Cloth         10         1.9           Sometimes toilet paper and sometimes cloth         4         4.8           No answer         34         4.0           Type of cleaning hairs on genital area*         34         4.0           Wax         34         4.0           Razor         4         4.8           Epolator         3         3.6           Goves         3         3.6           Goves         3         3.6           Goves         4         4.8           Epolator	Once time towards back	28	33.3	
Towards the front         19         2.26           Cleaning valva and anus separately         6         7.2           Drying after washing perineal area         8         95.2           Yes         80         95.2           No         4         4.8           The used material for drying the perineal area         66         78.6           Cloth         10         1.9           Sometimes toilet paper and sometimes cloth         4         4.8           No answer         34         4.0           Type of cleaning hairs on genital area*         34         4.0           Wax         34         4.0           Razor         4         4.8           Epolator         3         3.6           Goves         3         3.6           Goves         3         3.6           Goves         4         4.8           Epolator	Repeating towards back	21	25.0	
Randomly         6         7.2           Drying after washing perineal area         7.2           Yes         80         95.2           No         4         4.8           The used material for drying the perineal area         86         7.8           Cloth         10         11.9         11.9           Sometimes toilet paper and sometimes cloth         4         4.8         8.8           No answer         34         4.0         4.8         8.0           Type of cleaning hairs on genital area*         34         4.0		19	22.6	
Randomly         6         7.2           Drying after washing perineal area         7.2           Yes         80         95.2           No         4         4.8           The used material for drying the perineal area         86         7.8           Cloth         10         11.9         11.9           Sometimes toilet paper and sometimes cloth         4         4.8         8.8           No answer         34         4.0         4.8         8.0           Type of cleaning hairs on genital area*         34         4.0	Cleaning vulva and anus separately	10	11.9	
For some sime perineal area         95.2         25.2         80         95.2         14         4.8         4.8         4.8         4.8         4.8         4.8         4.8         4.8         4.8         1.0		6	7.2	
Yes         No         4         8           No         4         48           The used material for drying the perineal area         1           Cloth         10         11.9           Sometimes toiler paper and sometimes cloth         4         4.8           No answer         4         4.7           Type of Cetaning hairs on genital area*         3         4.0         4.7           Razor         40         4.7         4.6         4.6           Cream         4         4.8         8.1         2.0         4.0         <				
No         4         48           The used material for drying the perineal area         78.6           Cloth         10         11.9           Cloth         4         4.8           No answer         4         4.7           Type of cleaning hairs on genital area*         3         4.0           Wax         34         4.05           Razor         4         4.8           Epilator         3         3.6           Gloves         3         3.6           Gloves         3         3.6           The used material during menstruation         3         3.6           The used material during menstruation         4         4.8           The used material during menstruation         4         4.8           Totol         4         4.8         4.8           Sometimes pad and sometimes cloth         1         1.2         1.2           Cloth         4         4.8         <	, ,	80	95.2	
The used material for drying the perineal area         78.6         79.0         40.0         47.0         40.0         47.0         48.0         78.0	No	4		
Toilet paper         66         78.6           Cloth         10         11.9           Sometimes toilet paper and sometimes cloth         4         4.8           No answer         4         4.7           Type of cleaning hairs on genital area*           Wax         34         40.5           Razor         40         47.6           Cream         4         4.8           Epilator         3         3.6           Gloves         3         3.6           Gloves         3         3.6           Gloves         4         4.8           Epilator         3         3.6           Gloves         3         3.6           Gloves         4         4.8           Epilator         4         4.8           Gloves         4         4.8           Epilator         4         4.8           Sometimes pad and sometimes cloth         1         1.2           Cloth         4         4.8           Sometimes pad and sometimes cloth         3         3.4           Third-fort times in a day         3         4.5           Third-fort times in a day         5         6.1				
Cloth         10         11.9           Sometimes toilet paper and sometimes cloth         4         4.8           No answer         4         4.7           Type of cleaning hairs on genital area*           Wax         34         4.0.5           Razor         40         47.6           Cream         4         4.8           Epilator         3         3.6           Gloves         3         3.6           Gloves         79         94.0           Cloth         4         4.8           Sometimes pad and sometimes cloth         1         1.2           Changing time of pad/cloth           Twice in a day         29         34.5           Third-forth times in a day         29         34.5           Third-forth times in a day         29         34.5           When getting wet         2         2.5           Using of daily pad         29         8.2           No         29         8.2         1.7           Yes         15         1.7         2.2           Taking shower during menstruation         1         1.2         2.2           Standing         9		66	78.6	
Sometimes tollet paper and sometimes cloth         4         4.8           No answer         4         7.7           Type of cleaning hairs on genital area*         34         40.5           Wax         34         40.5           Razor         40         47.6           Cream         4         4.8           Epilator         3         3.6           Gloves         3         3.6           Gloves         3         3.6           The used material during menstruation         79         9.40           Cloth         4         4.8           Sometimes pad and sometimes cloth         1         1.2           Cloth         4         4.8           Sometimes pad and sometimes cloth         1         1.2           Under the problem of pad/cloth         4         4.8           Sometimes pad and sometimes cloth         3         4.0         4.0           Cloth aday         3         4.0         4.0         4.0           Twice in a day         3         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0				
No answer         4         4.7           Type of cleaning hairs on genital area*         8           Wax         34         4.0           Razor         40         4.76           Cream         4         4.8           Epilator         3         3.6           Gloves         3         3.6           The used material during menstruation           The used material during menstruation         79         9.40           Cloth         4         4.8         8         9.0           Cloth         4         4.8         8         9.0         1.0         1.0         1.2         1.2         1.2         1.0         1.0         1.2         2.0         1.0         1.0         1.2         2.0         3.4         4.0				
Type of cleaning hairs on genital area*         34         40.5           Wax         40         47.6           Razor         40         48.8           Epilator         3         3.6           Gloves         3         3.6           The used material during menstruation         79         94.0           Cloth         4         4.8           Sometimes pad and sometimes cloth         1         1.2           Changing time of pad/cloth           Twice in a day         3         4.0           Once in a day         3         4.0           Once in a day         2         3.5           Third-forth times in a day         2         3.5           When getting wet         2         2.5           Very Expert         5         6.9         8.1           Yes         5         6.9         8.2           Yes         5         6.9         8.2           Yes         5         6.9         8.2           Yes         3         3.1         1.0           Yes         5         6.9         8.2           Yes         5         6.9         8.2           Yes </td <td></td> <td></td> <td></td>				
Wax         34         40.5           Razor         40         47.6           Cream         4         4.8           Epilator         3         3.6           Gloves         3         3.6           The used material during menstruation         "9         94.0           Cloth         4         4.8           Sometimes pad and sometimes cloth         1         1.2           Changing time of pad/cloth         3         44.0           Twice in a day         3         45.           Once in a day         29         34.5           Third-forth times in a day         16         19.0           When getting wet         2         2.5           Using of daily pad         8         1.7           No         6         8.2         1.7           Yes         5         6.9         8.1           Yes         5         6.9         8.2           Yes         5         6.9         8.2           Yes         5         6.9         8.2           Yes         6         9         8.2           Position of taking shower during menstruation         8         9         9.0 </td <td></td> <td>•</td> <td>1 /</td>		•	1 /	
Razor         40         47.6           Cream         4         4.8           Epilator         3         3.6           Gloves         3         3.6           The used material during menstruation           Pad         79         9.40           Cloth         4         4.8           Sometimes pad and sometimes cloth         1         1.2           Changing time of pad/cloth         37         44.0           Once in a day         29         34.5           Third-forth times in a day         29         34.5           Third-forth times in a day         29         34.5           When getting wet         2         2.5           Using of daily pad           No         6         8.2.1           Yes         5         6.19           Yes         3         3.8           Positing of daily pad           No         5         6.9         8.2.1           Yes         3         3.8         1.9           Yes         6         9.2         1.9           Yes         6         9.2         1.0           Standing         9		34	40.5	
Cream         4         4.8         Epilator         3         3.6         3.0<				
Epilator Goves         3         3.6 Goves         3				
Goves         3         3.6           The used material during menstruation         7         94.0           Cloth         4         4.8           Sometimes pad and sometimes cloth         1         1.2           Changing time of pad/cloth           Twice in a day         37         44.0           Once in a day         29         34.5           Third-forth times in a day         16         19.0           When getting wet         2         2.5           Using of daily pad         69         82.1           No         69         82.1           Yes         15         17.9           Taking shower during menstruation         2         61.9           Yes         2         61.9           Yes         2         61.9           Yes         3         9.1           Position of taking shower during menstruation         17         20.2           Standing         9         10.7           No answer         4         2         50           Everyday         32         31.9           Twice or over a week         4         2.4         50           Everyday         3				
The used material during menstruation         79         94.0           Cloth         4         4.8           Sometimes pad and sometimes cloth         1         1.2           Changing time of pad/cloth           Twice in a day         37         44.0           Once in a day         29         34.5           Third-forth times in a day         16         19.0           When getting wet         2         2.5           Using of daily pad         8         2.1           No         69         82.1           Yes         15         17.9           Taking shower during menstruation         52         61.9           Yes         32         38.1           Position of taking shower during menstruation         8         6.9.1           Standing         17         20.2           Standing         17         20.2           Standing         17         20.2           No answer         4         5         6.9.1           Changing time of underwear         2         5         6.9.1           Twice or over a week         10         11.9           Type of underwear         4         5.2         4 <td></td> <td></td> <td></td>				
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# Discussion

In this study, we aimed to determine that knowledge and practices of genital hygiene of visual-disabled women. Visual-disabled women have a lack of knowledge and practices about genital hygiene as general women population in our country (Karatay and Özvarış, 2006; Özkan and Kulakaç, 2011; Ünsal, Özyazıcıoğlu and Sezgin, 2010).

In this study, almost one in two women did not take any knowledge about genital and menstrual hygiene and one in four women took the knowledge about genital hygiene, menstrual hygiene and vaginal discharge from their mother. Visual-disabled women have limited skills to learn and use abilities because they don't have the ability to distinguish visual signs, to mimic body language, or to take as a model and receive feedback. Especially mothers are very important in giving knowledge

to their daughters about personal, genital and menstrual hygiene issues. Mothers can't show sufficient attention or have a lack of communication, or lack of the correct knowledge (Rahayu, Suriah and Syafar, 2015). So it is important to inform the mothers of visual-disabled women about genital hygiene issues.

Two in five of women did not want to talk about where and whom they have got the knowledge about genital hygiene, menstruation, and vaginal discharge. This finding might be related to feeling ashamed of women. It is not easy to talk about genital hygiene issues because of its privacy in our country. So it is very important to have confidence in effective communication with visual-disabled women.

One in four of women said that they would like to get informed by a health professional. Demanding health care services is important in improving reproductive health. It is difficult to access health service for visual-disabled women. Visual-disabled women have disadvantages about getting knowledge, so we need to use effective teaching methods as healthcare providers. Health professionals are the right and trusted people who get this knowledge. Visual-disabled women should be informed of appropriate material and communication techniques. There is a clear necessity to develop more accessible material for visual-disabled women (Schopp et al., 2002). The nondisabled people who can get knowledge by seeing in the rate of 90%; by hearing in the rate of 8%; by touching in the rate of 1%; another way in the rate of 1% (Finkova, Joklikova, Ludikova and Majerova, 2014). Visual-disabled women stated that they don't know the genital area (Isler, Tas, Beytut and Conk, 2009; Rahayu et al., 2015), and they want to learn changes related to their own body (Pendergrass, Nosek and Holcomb, 2001). It is necessary to motivate visual-disabled women to know their own bodies so that they can interpret their own health needs.

Nearly one in five of women had scented vaginal discharge. Since these women were not considered to see changes in the vaginal discharge, only information about the smell was obtained. Visually disabled have limited sense of vision that makes it difficult to see their vaginal discharge, such as bad smell or different color. Visual-disabled women can be educated about the signs and symptoms of genital hygiene in a manner that is understandable. Some studies recommend that the health professionals can use demonstrations, simulations (Rahayu et al., 2015), internet sites (Pendergrass et al., 2001), television, radio, and books to inform those women about reproduction matters and subjects for visual-disabled women. Genital hygiene education programs and services that are tailored to the needs of visual-disabled women are essential.

Almost seven in ten women periodically don't go to a doctor. Generally, disabled women do not regularly go to gynaecological examinations, too (Dormire and Becker, 2007; Sudduth and Linton, 2011). Therefore, community-based home care services providing and monitoring of visual-disabled women are seen as important to make health services accessible. Health services should be provided to the women in this group to take account of their special condition. Health services need to develop to use tape and with material written in Braille because visual-disabled people need someone to communicate with external world and the use of vision is not the only way to transmit and share information so programs adapted to the visually disabled (Cavalcante et al., 2013; Costa et al., 2009; Cupples, Hart, Johnston and Jackson, 2012). It should not be forgotten that there is no system in our country that will allow visual-disabled women to read their prescriptions by themselves.

In this study, two in five women cleaned perineal area once time towards to front. Women clean genital urinary area in a wrong way so it can cause some reproductive infections and they need the education to develop a positive practices. Six of ten women did not take shower during menstruation and two of five women took shower during menstruation by sitting. Menstruation period is required to special care and hygiene, visual-disabled women do not take shower during menstruation because of cultural-religious factors in our country. In Turkish society, some think menstruation means "getting dirty", or "throwing away dirty blood from the body" (Isler et al. 2009). More than one-quarter of women took vaginal douching after sexual activity or perineal cleaning and almost all of women did not use feminine hygiene products for genital area. These results can be evaluated as better practices that need to be developed for reproductive health.

This study demonstrated that genital hygiene knowledge and practices and personal health practices of visual-disabled women should be improved. There is a lack of comprehensive knowledge and practices regarding genital hygiene related issues. Our findings clearly indicate the need for strategies and programs to raise genital hygiene-related awareness and to help genital hygiene to develop the appropriate skills and attitudes needed for a healthy life. Health professionals must learn the effective communication techniques for informing visual-disabled women improving the appropriate education materials and the continuation of the positive feedback of positive health practices. Not only the nurses, but also doctors, pharmacists and other disciplines should increase the sensitivity for the training programs must be organized. It is expected that this initiative will encourage health professionals to perform health education including visual-disabled women and their health needs so that there are more inclusive education and a healthier person.

#### **Implications for Practice**

Visual-disabled women expect health education, especially genital and personal hygiene done continuously, both in theory and practice. The results of the study are seen important for reproductive health. Visual-disabled women are a group where they need special care and the support required for the different problems that they come across. As known in our country, the health system is insufficient to meet the requirements. It is also important for health professionals to recognize the need to plan for visual-disabled women. In regards to disabled groups, country politics, clinical researches, the sensitivity of the health professionals and other areas must be regulated.

# Limitations

• The results of the study can be generalized for visual-disabled women who are members of an association and can be reached during the study.

The results of the knowledge and practices of genital hygiene were evaluated according to the women's statements and no
observations were made.

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