# Demographics as Variable in Assessing the Awareness and Utilization of Health Care Services of Emirati Women in the Western Region

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## ABSTRACT

Emirati women in the Western Region have limited access to specific health care. Thus, this study assessed the awareness and utilization of health care services of Emirati women of the seven municipalities in the Region identified through stratified random sampling. This quantitative descriptive-comparative and correlational research used a researchermade guestionnaire based on the guidelines of the Department of Health. Statistical computation using the mean revealed the women's lack of knowledge and information about government health care services and their rare availing of these services. The use of ANOVA showed significant differences in their awareness and utilization according to demographics. Pearson Product Moment Correlation showed a significant relationship between awareness and utilization of health care services. Significant challenges encountered are the distance to the health center, the long waiting time for the doctor, and religion. The study recommends to strengthen advocacy programs and provide appropriate health facilities to women.

**Keywords:** Health, Public Health Care Services, Awareness and Utilization, Emirati Women, Descriptive, Comparative and Correlational, Western Region, United Arab Emirates

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## 1.0. Introduction

The separation between genders in all aspects of life is a challenge for women in the Western Region because the privacy of women is of the utmost importance in the Islamic culture. They bear a substantial burden of health problems than their male counterparts do because of limited access to health care facilities and institutions. Thus, the growing efforts to promote and protect women's right to health.

Abu Dhabi Health Services Company (SEHA) in 2012 reported that the Western Region (Al Gharbia) has six hospitals to deliver health services and four primary healthcare centers whose function is to advocate for awareness. However, Paulo, Loney, and Lapao (2017) found that there is no ambulatory health care center in the region that should deliver services and also campaign for awareness. Only 4.79% of the health workforce is in the Western Region (HAAD Health Statistics, 2013). Private health providers constitute the most significant component of providing health care but are not concerned with the awareness and utilization of these services. The improvement of the health of its citizens and the performance of the healthcare system is one of the priorities of the UAE National Agenda 2021. However, the declining quality of care in the public health system and the rise of for-profit-providers have diminished its actual importance in health care provision and financing.

Few studies deal with the health care system of the Western Region. Lewando, Alzaroo, Hasna, and Alsmeiran (2012) focused on social protection. Kronfol (2012) reviewed the delivery of health care, while Elbiss (2013) investigated barriers to health care. Paulo, Loney, and Lapao (2017) studied the chronic care model while Koornneef, Robben, Al Seiari, and Siksek (2012) on the affordability of health care. World Health Organization reported that without intervention, half a million would die in pregnancy, childbirth, and soon after, thus awareness needs to be sustained(WHO, 2012). It advocates that greater access to and coverage for effective health intervention may be the routes from inputs to health outcomes.

Healthcare has proven to be the most resilient sector in the UAE (Jabbour, 2013), has progressed but suffered limitations (WHO, 2012; Kronfol, 2012). As revealed in the literature review, no study has been conducted to find out the awareness and utilization of government health care services by women in the municipalities of the Western Region of the UAE, causing a significant concern and a gap in the literature. Furthermore, no study was found to determine the relationship between awareness and utilization of government health care services in the Region. Hence, this study aimed to fill that gap in the literature by assessing the awareness of Emirati women of the seven municipalities in the Western Region and their utilization of public health care services in certain areas. It determined the differences in the awareness and utilization of government health care services based on the demographics of the respondents. This study also investigated the relationship between awareness and utilization of these services by Emirati women. This study likewise described the health care challenges and public health issues encountered by women in availing these health care services.

## 2.0. Framework of the Study

This study theorized that awareness of health care services would improve the utilization and quality of healthcare, thereby contributing to a healthy population and achievement of targeted health outcomes. This study anchored on the Andersen-Newman Behavioral Model of Health Service Use (Andersen, 1995), is appropriate as a conceptual basis since the study focuses on awareness and utilization of health care services (Babitsch, Gohl, & Lengerke, 2013). According to this theory, health beliefs, such as attitudes, values, and knowledge that people have towards the health care system, influence them to utilize these services. This study also considers the expansion of human behavior through several factors such as predisposing (age and place of residence), enabling (education and marital status) and need factors (state of health). Need factors are included, such as an individual's perceived and evaluated functional capacity, symptoms, and general state of health (Babitsch et al., 2012). A person's characteristics and behaviors, physical environment, and socio-economic environment (WHO, 2017) determine his health, whose prevalence differs by several factors.

The study focuses on the eight components of the health care system (perinatal, obstetric, gynecological, dermatological, dental, internal medicine, urological, and surgical care). These components were evaluated to determine the awareness of women when grouped as to age, place of residence, educational attainment, marital status, and state of health to predict their behavior. Awareness of health knowledge is associated with risk factors (Yuan, Qian, Huang, Tian, Xiang He, & Feng, 2015) adopted as variables of the study.

Likewise, utilization of health care was evaluated using the demographics of the respondents, such as place of residence as intervening variables. Access to care is essential for the utilization of services. Its link with other factors brought the discovery of the challenges encountered, such as distance, among others (Motlagh, Sabermahani, Hadian, Lari, Mohdavi, and Gorji, 2015). People cannot avail of the care if it does not exist in their geographic area, or if providers do not treat them (National Center for Health Statistics, 2016). Many factors affect health care utilization, including need. The need for services affects the differential use of health utilization for specific populations such as the women of the Western Region.

Finally, the framework establishes the relationship between awareness and utilization of health care services as influenced by the demographics of the respondents. Findings were used as the basis of a strategic plan to enhance awareness and utilization of health care services.

## 3.0. Methods

The study used a quantitative descriptive-comparative and correlational design. This design was used to determine the conditions that exist and the practices that prevail and to provide an accurate account of the characteristics of women of the seven municipalities in the Western Region as espoused by Burns and Grove (2005). The comparative approach was used to examine the differences between the different variables of the study (Kumah, 2015). Additionally, it attempted to reach a conclusion beyond single cases and explain differences and similarities between objects of analysis and the relations between objects against the backdrop of their contextual conditions (Esser & Vliegenthart, 2017). The differences were analyzed using mean, independent samples t-test, and ANOVA. Pearson Product Moment of correlation was used to determine the relationship between awareness and utilization of government health care services. The correlational method was used to explore the relationships between awareness and utilization of health care services. It measures the extent to which these two variables are related to determining which variables are interacting and what type of interaction is occurring (Thompson, Diamond, McWilliam, Snyder, & Snyder, 2005). The respondents selected by stratified random sampling technique were the female Emirati residents of the seven municipalities of the Western Region in the UAEwho meet the criteria of age. The sample size was obtained from the population in the seven municipalities taken from the latest statistical report of Statistical Yearbook of Abu Dhabi 2018.

A researcher-made survey questionnaire was used to collect the primary data in the study. The items have been based on the literature reviewed and align with the guidelines of the Department of Health (DOH), formally known as the Health Authority (HAAD), SEHA, and the World Health Organization (WHO). It has four parts: Part I on the self-reported profile of the respondents; Part II on the level of awareness of the respondents; Part III on the extent of utilization of these services; and Part IV on the challenges encountered in the utilization of the health care services. The section of the instrument that measured the level of awareness used a scale of 1 to 5. The highest rating in the scale is 5 with a verbal description of "extremely aware," which means excellent knowledge and information to the lowest point 1with verbal description of "not at all aware," which means "no knowledge and information on public health care services." The section on the extent of utilization also used a scale of 1 to 5 where the highest point is 5 with the verbal description of very great, which is interpreted as availing of public health services all the time. The lowest point is 1 with the verbal description of very low, which means not availing of public health services.

The questionnaire was subjected to content validation using the criteria for evaluation by Good and Scates by a jury of five members with a specialization in health care research. The content validity score is 4.55, which means that the questions were valid. Reliability was established through pilot testing among 30 randomly selected women residents of the Western Region who did not engage in the actual survey. Cronbach's Alpha method yielded an index of .935, indicating reliability. The instrument was changed into the local language to ensure understanding by the respondents. The enumerators administered the survey; they stationed at the municipal hall, public market, and health stations. Before clients participated, the enumerators seek their informed consent to ensure voluntary participation. They also explained the purpose and rationale and assured the clients of the anonymity and confidentiality of the data gathered from them. Any respondent could withdraw anytime from participation if uncomfortable in the process of gathering information. The materials that contain the raw information from the respondents would be shredded after data processing.

## 4.0. Results and Discussion

### Demographic Profile of Emirati women

Table 1 below shows that 25.6% of respondents lived in rural areas, while 74.4% lived in urban areas. Younger women comprised 45.2%, while older women respondents comprised 54.8% of total respondents. As to education, 11.2% had no formal education, 7.0% were elementary educated, 4.2% were high school educated, while the majority (76.2%) were college, and the postgraduate level respondents were only 1.3%. As to marital status, the majority were married, comprising 67.4%, single ranked second with 29.8% while only ten women were widowed, and only one was divorced. Those with excellent and very good health accounted for 30.5% of the respondents, while 34.2% were in good health. Only 4.7% were of a fair state of health.

<b>Table 1.</b> Profile of t	he Respond	ents
Variable	f	%
Residence		
Rural	98	25.6
Urban	285	74.4
Age		
Younger	173	45.2
Older	210	54.8
Education		
No Formal Education	43	11.2
Elementary	27	7.0
Junior High School	3	0.8
Senior High School	13	3.4
College	292	76.2
Post-graduate	5	1.3
Marital Status		
Single	114	29.8
Married	258	67.4
Widowed	10	2.6
Divorced	1	0.3
State of Health		
Excellent	117	30.5
Very Good	117	30.5
Good	131	34.2
Fair	18	4.7
Total	383	100.0

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	_	1 10,110	of the	nespondents	

#### Awareness of Health Care Services by Emirati Women

Tables 2A, 2B, and 2C show that as a whole, the level of awareness of Emirati women was "somewhat aware," which means that they generally lack knowledge and information on government health care services.

Table 2A. Level of Av	varenes	is on He	aith Ca	re Servi	ces				
Variable	F	Perinata	I	C	Obstetri	С	Gyı	necolog	ical
Valiable	Μ	SD	Int	Μ	SD	Int	Μ	SD	Int
Residence									
Urban	2.15	0.68	SA	1.80	0.80	NA	2.02	0.61	SA
Rural	2.78	0.49	MA	2.72	0.77	MA	2.85	0.63	MA
Age									
Younger	2.21	0.68	SA	1.80	0.78	NA	2.06	0.63	SA
Older	2.95	0.21	MA	3.06	0.42	MA	3.12	0.34	MA
Education									
No Formal Educ.	3.00	0.00	MA	3.20	0.00	MA	3.19	0.04	MA
Elementary	3.00	0.00	MA	3.20	0.00	MA	3.20	0.00	MA
Junior High Sch.	1.53	0.12	NA	1.20	0.00	NA	1.60	0.00	NA
Senior High Sch.	2.00	0.70	SA	1.45	0.38	NA	1.78	0.29	NA
College	2.56	0.63	SA	2.38	0.88	SA	2.56	0.74	SA
Post-graduate	2.60	0.55	SA	2.32	1.03	SA	2.56	0.88	SA
Marital Status									
Single	1.71	0.26	NA	1.20	0.00	NA	1.60	0.00	NA
Married	3.00	0.00	MA	3.03	0.29	MA	3.08	0.30	MA
Widowed	3.00	0.00	MA	3.20	0.00	MA	3.18	0.06	MA
Divorced	3.00	0.00	MA	3.20	0.00	MA	3.00	0.00	MA
State of Health									
Excellent	2.03	0.68	SA	1.59	0.63	NA	1.84	0.40	SA
Very Good	2.78	0.42	MA	2.59	0.75	SA	2.83	0.66	MA
Good	2.95	0.23	MA	3.09	0.45	MA	3.11	0.36	MA
Fair	3.00	0.00	MA	3.20	0.00	MA	3.19	0.05	MA
As a Whole	2.62	0.61	MA	2.49	0.87	SA	2.64	0.72	MA

Table 2A. Level of Awareness on Health Care Services

Note: NA=Not at All Aware, SA=Somewhat Aware, MA=Moderately Aware, HA=Highly Aware,EA=Extremely Aware

The same tables also show the awareness of the women when grouped according to the selected variables, place of residence, age, educational attainment, marital status, and state of health. Regarding the place of residence, the rural women are "not at all aware," while women in the urban areas are "somewhat aware." This result affirms Thoa, Thanh, Chue, and Lindholm (2013) that poor people in rural areas have less access to health services that could be explained by the limited presence of health workers (only 4.79%) tasked to educate residents on government health care services in the Western Region. These findings confirm Yaya, Bishwajit, Ekholuenetale, and Shah (2017), whose study revealed that in Bangladesh, not many women were aware of community health clinics. Furthermore, no ambulatory health center that provides primary health care in the municipalities of the Western Region is assigned to disseminate the advocacy programs of the government to the residents. Another reason for the lack of awareness of Emirati women is their limited access to health care,

Table 2B. Level of A	wurenes		iitri Car			rical		Irologia	
Variable		Dental			matolog	-		Irologica	
	М	SD	Int	Μ	SD	Int	Μ	SD	Int
Residence									
Urban	2.56	0.22	SA	2.56	0.22	SA	2.56	0.22	SA
Rural	2.60	0.09	SA	2.60	0.09	SA	2.60	0.09	SA
Age									
Younger	2.57	0.20	SA	2.57	0.20	SA	2.57	0.20	SA
Older	2.60	0.00	SA	2.60	0.00	SA	2.60	0.00	SA
Education									
No Formal Educ.	2.60	0.00	SA	2.60	0.00	SA	2.60	0.00	SA
Elementary	2.60	0.00	SA	2.60	0.00	SA	2.60	0.00	SA
Junior High Sch.	2.67	0.12	MA	2.67	0.12	MA	2.67	0.12	MA
Senior High Sch.	2.12	0.43	SA	2.12	0.43	SA	2.12	0.43	SA
College	2.60	0.08	SA	2.60	0.08	SA	2.60	0.08	SA
Post-graduate	2.60	0.00	SA	2.60	0.00	SA	2.60	0.00	SA
Marital Status									
Single	2.56	0.22	SA	2.56	0.22	SA	2.56	0.22	SA
Married	2.60	0.08	SA	2.60	0.08	SA	2.60	0.08	SA
Widowed	2.60	0.00	SA	2.60	0.00	SA	2.60	0.00	SA
Divorced	2.60	0.00	SA	2.60	0.00	SA	2.60	0.00	SA
State of Health									
Excellent	2.56	0.24	SA	2.56	0.24	SA	2.56	0.24	SA
Very Good	2.60	0.00	SA	2.60	0.00	SA	2.60	0.00	SA
Good	2.60	0.00	SA	2.60	0.00	SA	2.60	0.00	SA
Fair	2.60	0.00	SA	2.60	0.00	SA	2.60	0.00	SA
As a Whole	2.59	0.13	SA	2.59	0.13	SA	2.59	0.13	SA

Table 2B. Level of Awareness on Health Care Services

Note: NA=Not at All Aware, SA=Somewhat Aware, MA=Moderately Aware, HA=Highly Aware,EA=Extremely Aware

considering that their male counterparts are using the same health facilities. Cultural practices, religious beliefs, and traditions affect the health care behavior of women (Kushwaha, Mehnaz, Ansari, & Khalil, 2016), validating the theory utilized in this study.

Similarly, in terms of age, both younger and older Emirati women are "somewhat aware" of the health care services, although the older women exhibited higher means. Findings revealed that the older Emirati women had a higher level of awareness than the younger women in terms of health care services associated with pregnancy and childbirth. Also, this finding substantiated Rosella et al. (2014), who found age to have the strongest association with increasing levels of health care utilization.

In terms of education, interestingly, the respondents without formal education exhibited the highest mean indicating moderate awareness. It means that they have average knowledge and information on government health care services, and those with elementary education seconded. On the other hand, high school educated women are "not at all aware" of government health care services. This unawareness could be attributed to the ratio of unmarried or single women (12 out of 16) who are not aware of health care services that mostly concern the reproductive and maternal health of women. This finding is also affirmed by survey results on marital status, that single women are not at all aware of government health care services. Respondents with a

Variable	Inter	nal Med	icine	Sur	gical Hea	alth		Overall	
Variable	Μ	SD	Int	Μ	SD	Int	Μ	SD	Int
Residence									
Urban	1.44	0.14	NA	1.44	0.14	NA	1.44	0.14	NA
Rural	1.90	0.23	SA	1.90	0.23	SA	1.90	0.23	SA
Age									
Younger	1.51	0.23	NA	1.51	0.23	NA	1.51	0.23	NA
Older	2.00	0.00	SA	2.00	0.00	SA	2.00	0.00	SA
Education									
No Formal Educ.	2.00	0.00	SA	2.00	0.00	SA	2.00	0.00	SA
Elementary	2.00	0.00	SA	2.00	0.00	SA	2.00	0.00	SA
Junior High Sch.	1.40	0.00	NA	1.40	0.00	NA	1.40	0.00	NA
Senior High Sch.	1.40	0.00	NA	1.40	0.00	NA	1.40	0.00	NA
College	1.74	0.30	NA	1.74	0.30	NA	1.74	0.30	NA
Post-graduate	2.00	0.00	SA	2.00	0.00	SA	2.00	0.00	SA
Marital Status									
Single	1.51	0.23	NA	1.51	0.23	NA	1.51	0.23	NA
Married	1.89	0.23	SA	1.89	0.23	SA	1.89	0.23	SA
Widowed	1.94	0.19	SA	1.94	0.19	SA	1.94	0.19	SA
Divorced	2.00	0.00	SA	2.00	0.00	SA	2.00	0.00	SA
State of Health									
Excellent	1.40	0.00	NA	1.40	0.00	NA	1.40	0.00	NA
Very Good	1.88	0.24	SA	1.88	0.24	SA	1.88	0.24	SA
Good	2.00	0.00	SA	2.00	0.00	SA	2.00	0.00	SA
Fair	2.00	0.00	SA	2.00	0.00	SA	2.00	0.00	SA
As a Whole	1.78	0.29	NA	1.78	0.29	NA	1.78	0.29	NA

Table 2C. Level of Awareness on Health Care Services

Note: NA=Not at All Aware, SA=Somewhat Aware, MA=Moderately Aware, HA=Highly Aware, EA=Extremely Aware

college education and post-graduate education rated themselves "somewhat aware." These findings contradict Yuan et al. (2015); Mativo, Onyango, and Ombaka (2015); Kushwaha et al. (2016); and Aziz, Dero, and Ali (2018) about educated women's greater awareness of health care services because of their higher education that positively affects their health-seeking behaviors. However, Wolfel, Beltermann, Lottspeich, Vietz, Fischer, and Schmidmaier (2016) found out that education was perceived to be less critical. Highly educated women are not recipients of health care services of government because they have availed of the services of private clinics. Incidentally, the findings of this study also showed sections of the population within countries excluded from access to social services such as healthcare.

In terms of marital status, results showed that divorced women had the highest awareness while single women had the lowest. Also, "not at all aware," finding is consistent with the results on age, place of residence, and education. On "state of health," as a whole, those with excellent health are "not at all aware" of the health care services considering that they are not availing of these services, while women of good and fair health are "moderately aware," which had the highest rating. The reason is that those women of fair health have a higher rating because they frequent government health facilities. This finding supports Zyaambo, Siziya, and Fylkesnes (2012), who also

found that respondents with fair health status were found to be utilizing health facilities twice than those of good health; hence, they have higher awareness than the others.

Thus, the findings show that the demographic variables (place of residence, age, educational attainment, marital status, and state of health) of women respondents have influenced their awareness of government health care services.

When awareness of health services was investigated, the highest mean was for gynecological services that include the detection and management of women's reproductive health. Perinatal care seconded, and dental care was the third. Oppositely, the health service with the lowest rating in awareness was dermatological care. Internal medicine was the second-lowest in awareness with surgical care as the third lowest. The lack of awareness of internal medicine and surgical care may be explained by the fact that women are timid regarding services involving men.

#### Utilization of Health Care Services by Emirati women

Tables 3A, 3B, and 3C reveal that as a whole, the utilization of health care services by Emirati women was low. Of the services, obstetrics got the highest rating, which is moderate utilization, while dermatological services got the lowest rating, which means very low utilization. Further analysis of the results revealed that although obstetric care services were generally moderate in utilization, it is the only health care

Variable		Perinata		(	Obstetri	С	Gyı	necologi	ical
Valiable	Μ	SD	Int	Μ	SD	Int	Μ	SD	Int
Residence									
Urban	1.31	0.44	VL	1.66	0.92	VL	1.03	0.21	VL
Rural	2.13	0.63	Lo	3.28	1.19	Мо	1.49	0.64	VL
Age									
Younger	1.33	0.44	VL	1.67	0.88	VL	1.02	0.17	VL
Older	2.40	0.43	Lo	3.86	0.64	Gr	1.67	0.66	VL
Education									
No Formal Educ.	2.67	0.16	Mo	4.00	0.00	Gr	2.02	0.58	Lo
Elementary	2.60	0.00	Lo	4.00	0.00	Gr	1.80	0.58	VL
Junior High Sch.	1.00	0.00	VL	1.00	0.00	VL	1.00	0.00	VL
Senior High Sch.	1.18	0.29	VL	1.31	0.48	VL	1.00	0.00	VL
College	1.79	0.66	VL	2.70	1.34	Мо	1.26	0.53	VL
Post-graduate	1.72	0.70	VL	2.40	1.34	Lo	1.24	0.54	VL
Marital Status									
Single	1.00	0.00	VL	1.00	0.00	VL	1.02	0.09	VL
Married	2.28	0.38	Lo	3.65	0.64	Gr	1.47	0.59	VL
Widowed	3.00	0.00	Mo	4.00	0.00	Gr	3.00	0.00	Mo
Divorced	3.00	0.00	Mo	4.00	0.00	Gr	3.00	0.00	Mo
State of Health									
Excellent	1.21	0.35	VL	1.43	0.71	VL	1.03	0.20	VL
Very Good	1.83	0.49	Lo	3.05	1.18	Мо	1.18	0.50	VL
Good	2.53	0.37	Lo	3.84	0.68	Gr	1.73	0.62	VL
Fair	2.73	0.19	Mo	4.00	0.00	Gr	2.29	0.26	Lo
As a Whole	1.92	0.69	Lo	2.87	1.33	Мо	1.38	0.59	VL

Table 3A. Extent of Utilization of Health Care Services

Note: Lo=Very Low, Lo=Low, Mo=Moderate, Gr=Great, VG=Very Great

service that was highly availed of by some groups. It is noteworthy that obstetric care services for pregnant women include family planning. On the other hand, dermatological care service is seldom rendered by the government; thus, it is common in private clinics.

Surprisingly, the utilization of gynecological care is second-lowest when it was rated the highest in awareness. The best explanation is that despite the women's moderate awareness of gynecological service, the utilization is very low. By their culture, they do not allow male doctors to examine them; thus, their utilization of this service is very low, implying the lack of female doctors in the Western Region. The findings align with Alemahayu (2010), for in Ethiopia, low utilization was due to fear, shyness, and culture, among others. These findings validate Andersen-Newman Behavioral Model of Health Service Use that health beliefs such as attitudes, values, and knowledge towards health influence utilization.

Utilization was also measured using demographic variables place of residence and age as predisposing factors espoused by the expanded Andersen-Newman Model. In terms of place of residence, the overall score for rural women was very low, while for urban women was low, most likely because of the distance to the health center. These results affirmed Hodge, Firth, Bermejo, Zeck, and Jimenez-Soto (2016) and Yuan et al. (2015), who found that distance to a health facility is a significant contributor to disparities in utilization of health care services or as a disincentive for women to seek care.

Variable		Dental		Urolo			Derr	natolog	ical
Variable	Μ	SD	Int	М	SD	Int	М	SD	Int
Residence									
Urban	2.60	0.00	Lo	2.60	0.00	Lo	2.60	0.00	Lo
Rural	2.60	0.00	Lo	2.60	0.00	Lo	2.60	0.00	Lo
Age									
Younger	2.60	0.00	Lo	2.60	0.00	Lo	2.60	0.00	Lo
Older	2.60	0.00	Lo	2.60	0.00	Lo	2.60	0.00	Lo
Education									
No Formal Educ.	2.60	0.00	Lo	2.60	0.00	Lo	2.60	0.00	Lo
Elementary	2.60	0.00	Lo	2.60	0.00	Lo	2.60	0.00	Lo
Junior High Sch.	2.60	0.00	Lo	2.60	0.00	Lo	2.60	0.00	Lo
Senior High Sch.	2.60	0.00	Lo	2.60	0.00	Lo	2.60	0.00	Lo
College	2.60	0.00	Lo	2.60	0.00	Lo	2.60	0.00	Lo
Post-graduate	2.60	0.00	Lo	2.60	0.00	Lo	2.60	0.00	Lo
Marital Status									
Single	2.60	0.00	Lo	2.60	0.00	Lo	2.60	0.00	Lo
Married	2.60	0.00	Lo	2.60	0.00	Lo	2.60	0.00	Lo
Widowed	2.60	0.00	Lo	2.60	0.00	Lo	2.60	0.00	Lo
Divorced	2.60	0.00	Lo	2.60	0.00	Lo	2.60	0.00	Lo
State of Health									
Excellent	2.60	0.00	Lo	2.60	0.00	Lo	2.60	0.00	Lo
Very Good	2.60	0.00	Lo	2.60	0.00	Lo	2.60	0.00	Lo
Good	2.60	0.00	Lo	2.60	0.00	Lo	2.60	0.00	Lo
Fair	2.60	0.00	Lo	2.60	0.00	Lo	2.60	0.00	Lo
As a Whole	2.60	0.00	Lo	2.60	0.00	Lo	2.60	0.00	Lo

Table 3B. Extent of Utilization of Health Care Services

Note: Lo=Very Low, Lo=Low, Mo=Moderate, Gr=Great, VG=Very Great

Variable	Intern	al Medi	cine	5	Surgical			Overall	
Variable	М	SD	Int	Μ	SD	Int	М	SD	Int
Residence									
Urban	1.64	0.08	VL	1.64	0.08	VL	1.64	0.08	VL
Rural	1.75	0.08	VL	1.75	0.08	VL	1.75	0.08	VL
Age									
Younger	1.64	0.08	VL	1.64	0.08	VL	1.64	0.08	VL
Older	1.79	0.04	VL	1.79	0.04	VL	1.79	0.04	VL
Education									
No Formal Educ.	1.80	0.00	VL	1.80	0.00	VL	1.80	0.00	VL
Elementary	1.80	0.00	VL	1.80	0.00	VL	1.80	0.00	VL
Junior High Sch.	1.60	0.00	VL	1.60	0.00	VL	1.60	0.00	VL
Senior High Sch.	1.61	0.04	VL	1.61	0.04	VL	1.61	0.04	VL
College	1.71	0.10	VL	1.71	0.10	VL	1.71	0.10	VL
Post-graduate	1.72	0.11	VL	1.72	0.11	VL	1.72	0.11	VL
Marital Status									
Single	1.60	0.00	VL	1.60	0.00	VL	1.60	0.00	VL
Married	1.78	0.07	VL	1.78	0.07	VL	1.78	0.07	VL
Widowed	1.80	0.00	VL	1.80	0.00	VL	1.80	0.00	VL
Divorced	1.80	0.00	VL	1.80	0.00	VL	1.80	0.00	VL
State of Health									
Excellent	1.61	0.04	VL	1.61	0.04	VL	1.61	0.04	VL
Very Good	1.76	0.08	VL	1.76	0.08	VL	1.76	0.08	VL
Good	1.79	0.05	VL	1.79	0.05	VL	1.79	0.05	VL
Fair	1.80	0.00	VL	1.80	0.00	VL	1.80	0.00	VL
As a Whole	1.72	0.10	VL	1.72	0.10	VL	1.72	0.10	VL

Table 3C.	Extent o	f I Itilization	of Health	Care Services
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Note: Lo=Very Low, Lo=Low, Mo=Moderate, Gr=Great, VG=Very Great

In terms of age, as a whole, younger women indicated very low utilization compared to older women who indicated low utilization in support of Quian, Zhou, Yan, Gao, Wang, Yang, and Li (2017) that health service utilization increased in women as age increased. However, this finding opposed to that of Khanal, Adhikari, Karkee, and Gavidia (2014) that postnatal care services reduced with increased maternal age. When education was used as an enabling factor to determine utilization, it was found that women without formal education rated the highest utilization. It is most likely because of their inadequate means to support themselves; thus, they are the ones who frequent government health centers to avail of government services, especially health care. The second highest was the women of the elementary level. The lowest was the high school women who are not utilizing these services because they are single.

These findings revealed the interplay of education and marital status in the utilization of health care services. Notably, obstetric care was rated the highest, followed by dental and surgical services because these two health care services can be serviced by male doctors. Contrastingly, the results on education claimed that higher education influenced greater utilization of health care services (Alvaro & Oducado, 2014; Al-Sharbatti & Sadek, 2014; Mativo et al., 2015; Hodge et al., 2016; Aziz et al., 2018). However, Qian et al. (2017) and Rurangirwa, Mogren, Nyirazinyoye, Ntaganira, and Krantz (2017) revealed that women of lower economic status are more vulnerable to diseases because of low education levels; hence, they utilized free health services more often. As to marital status, utilization as a whole was low. Married, widowed, and divorced women rated their utilization low, and single women rated very low. On the "state of health" as a variable, it was revealed that women of excellent health rated very low, while the women of fair health rated their utilization the highest, although it remains at the low level. This finding affirmed Zyaambo et al. (2012) and Qian et al. (2017), who found out that respondents who rated their health status as poor or fair were found to be utilizing health facilities twice than those who rated their health status very good or excellent.

#### Difference in the Level of Awareness on Health Care Services of Emirati Women

Tables 4A and 4B show significant differences in the awareness of health care services of Emirati women in the Western Region when they are grouped according to demographic variables of the place of residence, age, educational attainment, marital status, and state of health. As to the place of residence, the significant difference is attributed to the limited access to information of the women living in rural areas compared to the women in urban areas. Tanalgo (2018) found that city residents have gained enhanced knowledge of health services through social media and mass media. In terms of age, the difference is significant, with older women more aware than the younger women respondents. The difference is attributed to the increase in maternal age that makes women more aware of health issues. In terms of education, the post hoc test revealed that respondents without formal and with elementary education have significantly higher awareness than the respondents with high school education because most of the high school educated respondents in this study are single. Single women are prohibited access to matters concerning married individuals because of their culture. This finding also demonstrates the interaction of education with marital status, supporting the study of Angore (2018) that other socio-demographic variables such as marital status, religion, and income affect the awareness of health services.

Moreover, a significant difference in the awareness of women when grouped according to their state of health was discovered. Post hoc test revealed that the respondents with a fair and good state of health have significantly higher awareness

Area	Place	of Resid	ence		Age		Educati	Educational Attainment		
Aled	t	df	р	t	df	р	F	df	р	
Perinatal	9.825*	381	0.000	15.046*	381	0.000	12.170*	5, 377	0.000	
Obstetric	10.110*	381	0.000	20.098*	381	0.000	18.834*	5, 377	0.000	
Gynecological	11.298*	381	0.000	20.977*	381	0.000	16.657*	5, 377	0.000	
Dental	2.341*	381	0.020	2.191*	381	0.029	54.871*	5, 377	0.000	
Dermatological	11.367*	381	0.000	24.244*	381	0.000	32.303*	5, 377	0.000	
Urological	13.240*	381	0.000	29.686*	381	0.000	35.039*	5, 377	0.000	
Internal Med.	18.804*	381	0.000	30.339*	381	0.000	18.564*	5, 377	0.000	
Surgical Health	13.139*	381	0.000	29.750*	381	0.000	21.070*	5, 377	0.000	
Awareness	13.511*	381	0.000	28.957*	381	0.000	27.006*	5, 377	0.000	

Note: \*the difference in the means is significant when p<0.05

than the respondents with an excellent and very good state of health because women of only good and fair state of health mostly have no formal education, and are, thus, dependent on their husbands for support. The only means for them to take care of themselves is to avail of the public health care services. This finding further confirms the flexibility of two demographic variables (education and state of health) on the awareness of the respondents. Another reason is that those with an excellent state of health do not need public health care services, resulting in lower awareness. As to marital status, awareness was higher among married and widowed respondents than the single respondents. In affirmation, Rurangirwa et al. (2017) found single women at a higher risk but of reduced utilization compared to married women who have availed of these services.

Area	Sta	te of Health	า	Ma	Marital Status			
Aled	F	df	р	F	df	р		
Perinatal Health	95.821*	3, 379	0.000	3211.341*	2, 379	0.000		
Obstetric	138.399*	3, 379	0.000	2370.541*	2, 379	0.000		
Gynecological	163.757*	3, 379	0.000	1407.646*	2, 379	0.000		
Dental	3.014*	3, 379	0.030	3.252*	2, 379	0.040		
Dermatological	688.864*	3, 379	0.000	57.291*	2, 379	0.000		
Urological	579.061*	3, 379	0.000	100.034*	2, 379	0.000		
Internal Medicine	463.658*	3, 379	0.000	115.939*	2, 379	0.000		
Surgical Health	165.390*	3, 379	0.000	835.994*	2, 379	0.000		
Awareness	309.287*	3, 379	0.000	825.545*	2, 379	0.000		

 Table 4B. Differences in the Level of Awareness on Health Care Services

Note: \*the difference in the means is significant when  $p\underline{<}0.05$ 

#### Difference in the Extent of Utilization of Health Care Services of Emirati Women

Tables 5A and 5B reveal significant differences in the utilization of health care services when the women in terms of place of residence, age, educational attainment, marital status, and state of health, which means that utilization is influenced by the women's demographic characteristics. However, no significant difference was revealed in the utilization of dental and surgical care in terms of the women's state of health. The difference in surgical care was also not significant in terms of marital status and age.

The significant difference in the utilization of health care services in terms of place of residence substantiated the findings of Rushender, Balaji, and Parasuraman (2016) that utilization falls as distance increases. As to age, the difference was also significant because of the older women's lower utilization than that of the younger women due to acquired experiences, except for surgical care, which caters to both genders. In terms of educational attainment, the difference was also significant because women with no formal education and with elementary education revealed higher utilization compared to high school educated women. On the state of health, a significant difference was found on all health care services except on dental and surgical care because all women revealed low utilization of these services. In terms of maternal health, reproductive health, and health services that concern women, a significant difference was revealed. The significant difference is on women with a fair state of health, who are often sick and have been admitted to health care institutions;

thus, their utilization is higher compared to women with excellent state of health. In terms of marital status, the significant difference in the utilization of all health care services revealed the widows' rating to be exceptionally higher except for surgical care. The difference in surgical care was not significant because all women need the consent of either their husbands or parents when treated for surgery.

			,	,					
Area	Place of Residence			Age			Educational Attainment		
	t	df	р	t	df	р	F	df	р
Perinatal	11.863*	381	0.000	19.448*	381	0.000	30.149	5, 377	0.00
Obstetric	12.308*	381	0.000	28.030*	381	0.000	20.079	5, 377	0.00
Gynecological	7.079*	381	0.000	28.030*	381	0.000	20.475	5, 377	0.00
Dental	22.571*	381	0.000	6.076*	381	0.000	9.173	5, 377	0.00
Dermatological	11.058*	381	0.000	20.253*	381	0.000	24.383	5, 377	0.00
Urological	11.772*	381	0.000	22.393*	381	0.000	16.766	5, 377	0.00
Internal Med.	2.215*	381	0.027	1.426	381	0.155	9.801	5, 377	0.00
Surgical Health	12.173*	381	0.000	25.472*	381	0.000	27.793	5, 377	0.00
Utilization	11.863*	381	0.000	19.448*	381	0.000	30.149	5, 377	0.00
			-						

#### Table 5A. Differences in the Extent of Utilization of Health Care Services

Note: \*the difference in the means is significant when  $p \leq 0.05$ 

Table 5B. Differences in the Extent of Utilization of Health Care Services

Area	Stat	e of Health		Marital Status			
Area	F	df	р	F	df	р	
Perinatal Health	251.689*	3, 379	0.000	715.631*	2, 379	0.000	
Obstetric	177.576*	3, 379	0.000	1024.765*	2, 379	0.000	
Gynecological	73.173*	3, 379	0.000	91.250*	2, 379	0.000	
Dental	0.000	3, 379	1.000	10.167*	2, 379	0.000	
Dermatological	147.541*	3, 379	0.000	1817.505*	2, 379	0.000	
Urological	237.790*	3, 379	0.000	434.585*	2, 379	0.000	
Internal Medicine	1.268	3, 379	0.285	1.973	2, 379	0.141	
Surgical Health	209.090*	3, 379	0.000	822.715*	2, 379	0.000	
Utilization	251.689*	3, 379	0.000	715.631*	2, 379	0.000	

Note: \*the difference in the means is significant when  $p \leq 0.05$ 

#### Relationship Between Awareness and Utilization of Health Care Services

Table 6 shows the significant correlation between awareness and utilization of health care services. Several studies have shown that higher awareness translates to higher utilization of public health services as also revealed in several studies (Mativo et al., 2015; Rosella, Fitzpatrick, Wodchis, Calzavara, Manson, & Goel, 2015; Dile, Workie, Seyum, & Demeke, 2016; Aziz et al., 2018).

The demographic variables such as place of residence, age, education, marital status, and state of health have significantly influenced the awareness measured through the level of knowledge and information and utilization measured in terms of availing of these services. In terms of place of residence, rural women who were found to have no knowledge and information about health care services also did not avail of the government's health care services. In terms of education, the high school-educated women with no knowledge and information about health care services also did not avail of health care services. Marital status revealed the same findings that single women who

have no knowledge and information about health care services have also not availed of these services. As to the state of health, women who exhibited excellent health and have no knowledge and information on government health services, have not availed of these services, or had the lowest utilization of government health services. This meant that it is not awareness alone that determined utilization but also their demographic characteristics that determined both awareness and utilization. These findings also confirmed the interaction of awareness and demographics of women on the utilization of government health care services.

,			
Variable	r	df	р
Awareness x Utilization	0.963*	381	0.000

Note: \*the correlation is significant when p<0.05

#### Challenges Encountered in Health Care Utilization

Finally, the significant challenges found were distance of the health center, long waiting time for the doctor, and religion that substantiate Paulo, Loney, and Lapao (2017), who found patients' undirected access to services resulting in inappropriate use. Religion demands a separation between genders as part of their culture; thus, women should not access services handled by men implying the lack of female doctors in the municipalities subject of this study as one of the causes of lower utilization of government health care services.

The survey revealed that all women prefer to visit a doctor's office or a private clinic while only 97.9% prefer going to the hospital outpatient department, and 92.7% go directly to the emergency room for outright treatment although more than 50% go to a community health center or a public clinic. Only 45.4% of women responded to the question of "Why did you visit the *barangay* health center or a health clinic?" There is no one "acceptable" level except compulsion to achieve a high rate in surveys (Cornish, 2002); thus, since the respondents are modest women, their response rate was low, especially on sensitive topics like their health as a woman. Results of the survey revealed that the purpose of women visiting the health center is child health and free medicines, which revealed that Emirati women had experienced the economic problem (Kamau, Osuga, & Njuguna, 2017). The other reasons that women visited the health center are accident/injury or emergency reasons, short-term illness or temporary condition, and maternity care.

## 5.0. Conclusion

The distribution of health care institutions and the health workforce in the United Arab Emirates (UAE) supposedly to manage the health programs of government needs to be reviewed. The findings of low awareness of government health care services revealed the influence of demographics of women such as place of residence, education, marital status, and state of health, consequently, affirming the need of active advocacy programs.

The challenges encountered by women in availing of the services have contributed to the low utilization of these government health care services. These challenges link with demographic variables such as distance to the health center on place of residence of women, long waiting time for the doctor attributed to the education of women, maternity care on marital status, and accident/injury on the state of health. The implication of these findings is clear that there is an urgent need for the government to direct the health care needs of women. The government is likewise recommended to immediately provide appropriate health facilities such as an all-women hospital in the municipalities of the Western Region. If necessary, a public-private partnership scheme of funding shall be availed.

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