

Patient-Nurses-Relationship With in Deaf and Hard Of Hearing (D&HH) Population

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Abstract: *this study attempts to describe nurses' relationship with deaf and hard of hearing (D&HH) population; nurses' communication skills, their preferred methods in communicating with D&HH patients, and their usage of interpretation services. Non-random stratified sample was designed; three strata hospitals in Riyadh were selected purposively as deaf patients are expected to visit more, then 200 nurses were selected accidentally due to limitation of time and 140 of them have participated (response rate 70%). Results showed that 74% of the participants had to treat deaf patients in some points in their career, 71% haven't had instructions on communicating with those patients during their nursing studies and only 21% found it very critical to deal with deaf patients. Out of the study sample, 62% used paper and pen to communicate with deaf patients. While 28% of the study participants had to use interpreter, 58% communicated with the patient before the interpreter arrived and 62% reported that it takes more than one hour for the interpreter to arrive. Finally, 90% of the participants did not know if interpreters were available around the clock. In conclusion, this study showed the need to equip nurses with adequate deafness communication skills beside the necessity to employ the interpretation service properly to improve the level of services provided to D&HH patients.*

Keywords: *Communication, Deaf, Hard of hearing, Interpreters, Sign language.*

I. Introduction

At the end of the 20th century, World Health Organization announced that around the world there were 360 million people with some disabling hearing loss, 91% of them were adults and 8.9% were children. While some scientists think the number of deaf and hard of hearing individuals is still unrecognized [1]. Several studies covered deaf and hard of hearing population within health care systems and major concerns have been reported as serious issues found to face deaf people. They are having difficulty in accessing healthcare due to their physical condition and they are experiencing more delays than individuals without hearing impairment conditions. Health care providers are required to assess accessibility in healthcare for individuals with hearing deficiency conditions to insure care with good quality level [2]. Some health providers have been found equipped to deal with deafness while other providers have been found to feel uncomfortable when dealing with those patients with special needs due to hearing impairments. Individuals with hearing conditions are facing difficulties when accessing health care system mainly due to communication barriers [3].

Although equality has been always one of the main objectives in any health care system which means treating individuals equally without any sort of discrimination, some individuals are facing some challenges related to some of their characteristics such as gender, age, income or disability [4]. Deafness, as one of disability conditions, causes difficulties and delays in accessing health care resulted from inadequate communication with health care providers [1]. Most of health care providers were found to be unaware of how to communicate properly with deaf patients and that would affect the service they provide to those patients. They lack knowledge of sign language, don't understand deaf culture and limited in their communication methods with deaf patients. Some even feel uncomfortable when dealing with deaf patients [5].

II. Methodology

The current study is a descriptive study aimed to describe nurses - patients' relationship within deaf and hard of hearing population. The study population was nursing staff in governmental hospitals in Riyadh and a non-random stratified sample was generated from hospitals that have clinics related to deaf concern, hearing diseases, speech disorders and ENT clinics. Three hospitals were chosen purposively as deaf patients are expected to visit more, then nurses were selected accidentally due to time constrains of the study. King Abdul-Aziz University Hospital, King Khalid University Hospitals, National Guard Hospital were the most suitable sittings to serve current study's objectives in Riyadh region.

The study instrument was adopted from a study conducted by Emily Michelle Czernielewski in 2012 to enhance communication for inpatients using American Sign Language [6]. It aims to describe Patient- nurses - relationship within deaf and hard of hearing population (D&HH) by describing nurses skills in communicating with deaf and hard of hearing patients, what communication methods nurses prefer to use with those patients, and availability and use of interpretation services by nurses when communicating with D&HH patients. The

questionnaire has three parts in addition to demographic questions in the first part that covered participants' demographic information. Part two covers nurse's Communication skills in dealing with deaf and hard of hearing patients, it has six items that include if nurses ever had treated D&HH patients, using manual language, knowing sign language, have any instruction or training on communication with D&HH individuals and how critical is it dealing with those patients. Part three covers methods used when dealing with deaf and hard of hearing patients. It has four items that include methods and devices of communication and how to use them. Part four covers the availability of interpreters in the hospital when dealing with deaf and hard of hearing patients. It has five items asking about interpretation services in hospitals setting.

Data were collected in the year of 2014 from 13 November till 10 December. 200 questionnaires were distributed in the three selected hospitals. The primary researcher made several visit to insure collecting more responses and 140 filled questionnaires were completed (response rate 70%). A descriptive analysis was carried out by using the Statistical Package for Social Sciences (SPSS) to describe the relationship that nurses have with deaf and hard of hearing patients in regard to communication skills, preferred communication methods, and the usage of interpretation services.

The study findings should be reported with caution due to the limitations noticed by the researchers which include language barriers; as noticed through collecting the data that some of the nurses were not able to fill the questionnaire without translation assistance and that might have affected the meaning and consequently their selected answers. Another limitation engendered from participated nurses who lack the experience of dealing with deaf or hard of hearing patients.

III. Results

3.1 Part One: Participants' Demography. Each of the study three hospitals provides about third of the study sample. As shown in Table (1) the majority of the participants were female, 88 of them were unmarried. Most of them were in the age group from 26 to 40 years old, and in the lower salary category. 24 nurses have diploma, 111 were bachelor graduates and 5 earned master degree as the highest education level within the study participants. Only 38 of the sample were Saudi national and 41 have Arabic as their mother tongue language while 65 have the English mother tongue language.

Table (1): Participants' Demography

Items	Characteristics			
Gender	Male		Female	
	16		124	
Marital status	Married		Unmarried	
	52		88	
Age	25 – or under	26- 40	41-55	56- or older
	24	97	15	4
Income	10,000-or less	11,000-20,000	21,000-30,000	31,000-or more
	118	13	3	6
Education	Diploma	bachelor	Master	Doctorate
	24	111	5	0
Nationality	Saudi	Non Saudi		
	38	102		
Mother tongue	Arabic	English	Other	
	41	65	34	
Hospital name	KAUH	KKUH	NGH	
	51	45	44	
Department	Inpatient	Outpatient	ER	Other
	36	76	16	12

3.2 Part Two: Nurses' Skills in Communicating with D&HH Patients. In regard to nurses' skills, although 74% of the participants had to treat deaf patients in some point in their career, only 29% and 20% had some instructions in their nursing schools and received some training in-service on communicating with D&HH patients, respectively. In addition to that, only 32% of the entire study sample reported that they knew sign language and 49% of them have used some form of manual communication. About 39% of the participants think that being able to communicate with D&HH patients is somewhat critical while 14% think it is not critical at all. (Table 2).

Table (2): Nurses' Communication Skills

Item	Communication skills	Yes		No	
		F	%	F	%
1	Have you ever had to treat a patient who was deaf or hard of hearing?	104	74.3	36	25.7
2	Have you used any form of manual communication?	68	48.6	72	51
3	Do you know Sign Language?	45	32	95	68
4	Did you have any instruction on communicating with deaf patients in nursing	41	29	99	71

	school?				
5	Have you received any in-service training on communicating with deaf patients?	28	20	112	80
6	How critical is it that you to be able to effectively communicate with your patients?				
•	very critical		30		21%
•	somewhat critical		54		38.6%
•	slightly critical		37		26.4%
•	no critical at all		19		13.6%

3.3 Part Three: Methods Used when Dealing with Deaf and Hard of Hearing Patients. As shown in Table (3) more than half of the participants (62%) used paper and pen in communicating with their D&HH patients and 49% used signing. About 29% used speech and lip reading method while only 4% and 11% used wireless keyboard and text messaging, respectively. Almost the same result was detected with nurses intention to the future use of communication methods as 64% and 44% will use paper and pen and signing, respectively in case of dealing with D&HH patients in the future. In regard to preference, more than half of the participants (55%) reported that they would choose paper and pen but 36% would prefer communication device that can produce sign and spoken language. Finally, less than half of the participants (32%) reported that if they could have a device that could sign to their patient, they would use it to talk about emotions, also only 45% would use it to talk about pain management issues. While 54% would use it to ask if the patient wants an interpreter and 49% would talk about bedside cares.

Table (3): Communication Methods with D&HH Patients

Item	Communication Methods	Responses	
		F	%
1	How did you communicate with deaf and hard of hearing patients?		
	a. Signing	68	48.6
	b. Paper and pen	87	62.1
	c. Text messaging	15	10.7
	d. Wireless keyboard.	5	3.6
	e. Speech and lip readin	40	28.6
2	If you had to choose a device to communicate with a deaf patient, which would you choose?		
	a. Paper and pen	77	55
	b. Communication boards (pictures of your needs)	31	22.1
	c. Wireless keyboard (two keyboards that allow you and the patient to type back and forth)	13	9.3
	d. Text messaging	6	4.3
	e. Communication device that can produce sign and spoken language	50	35.7

Table (3): Communication Methods with D&HH Patients..... cont'd

Item	Communication Methods	Responses	
		F	%
3	If you were to have to treat a patient who was deaf, how would you communicate with them?		
	a. Signing	61	43.6
	a. Paper and pen	90	64.3
	a. Text messaging	5	3.6
	a. Wireless keyboard	6	4.3
	b. Speech or lip reading	34	24.3
4	If you could have a device that could sign to your patient would you use it to...(circle all that apply)		
	a. Ask if the patient wants an interpreter?	75	53.6
	b. Talk about bedside cares?	68	48.6
	i. Vitals	11	7.9
	i. Medication	12	8.6
	i. Positioning	8	5.7
	v. Bathing/grooming	8	5.7
	c. Talk about pain management issues?	63	45
	i. Locus of pain	7	5
	i. Amount of pain	9	6.4
	d. Talk about emotions?	45	32.1
	e. Just to chat?	13	9.3

3.4 Part Four: Availability of Interpreters While Caring for Deaf or Hard of Hearing Patients. Only 28% of the participants reported that they had to use interpretation service in some point when they dealt with D&HH patients and 58% were able to communicate with their patients before the arrival of the interpreter. At the same time 42% of them have experienced a need for interpreters who were not available and 90% don't know if interpreters are available around the clock or not. Finally, out of those who used interpretation services, 62%

reported that it took more than one hour for the interpreter to arrive and only 9% said less than 10 minutes was the waiting time for the interpreter (Table 4).

Table (4): Interpretation Services

Item	Interpretation when dealing with deaf and hard of hearing patients	Yes		No	
		F	%	F	%
1.	Have you ever had to use a hospital interpreter?	39	27.9	101	72.1
2.	Were you able to communicate with the patient before the interpreter arrived?	81	57.9	59	42.1
3.	Do you know if interpreters are available 24/7?	14	10	126	90
4.	Have you ever experienced a time when you needed to communicate with your patient but an interpreter was not available?	59	42.1	81	57.9
5.	How long did it take for the interpreter to arrive?				
	less than 10 minutes			12	8.6
	30 minutes or less			25	17.9
	1 hour			16	11.4
	more than 1 hour			87	62.1

IV. Discussion

From the study findings, nurse’s skills in communicating with deaf and hard of hearing patients require attention. Less than one fourth of the participants feel that communicating with those patients is very critical, this could be justified when knowing that some of the study sample haven't ever treat D&HH patients. More than half of the respondents did not use any form of manual communication nor they know sign language and lots of them did not have instructions on communicating with deaf patients in nursing school. The majority of the participated nurses did not receive in-service training on communicating with those patients. This finding is consistent with the finding of a study conducted in 2011 by J. Kritzinger [7] to explore the barriers and facilitators to health care services and health care information for deaf people in Worcester where the findings showed that deaf patients have less access and that the main barrier was communication. In addition to the finding of a study carried out by M. Jackson in 2011 to understand deafness in antenatal care and found that many deaf women experience inequality during pregnancy and childbirth, mainly arising from communication difficulties. [8]

In regard to communication methods, the study findings showed that using paper and pen was the main method used when nurses communicate with D&HH patients and they will use it in the future which indicates their preference for this mean regardless of availability of other means of communication and that might be resulting from being deficient in sign language and from lacking instructions in nursing schools and training in the job on communication with those patients. In addition to that, patients should also have the ability to use the other methods that require training and practice as for example not all D&HH patients have the ability to read lips and that might limit nurses’ ability to use methods other than paper and pen but also for that same reason nurses must be equipped with skills that would enable them to communicate properly with their various patients. This finding is consistent with Michelle’s study in 2012 which aimed to enhance communication for those using American Sign Language and its findings revealed that some providers used paper and pen while fewer providers used text messages and keyboards [6]. Karras and his colleagues in 2011 conducted a study to examine problems faced by deaf patients and they concluded very serious issues; unavailable American Sign Language interpreters, deaf patients treated with less attention as unimportant individuals with less respect when communicating with them while some physicians would even refuse to communicate with deaf individual, and mainly they concluded the lack of deaf cultural understanding from the physician side [9]. While earlier in 1995 when David and his colleagues had studied physicians’ communication with deaf patients, they found that although most physicians realized the role of the interpreters, only few had used them while providing the service [10]. In the current study near half of the participated nurse reported that they used signing to communicate with their D&HH patients and that rank signing as the second method of communication after paper and pen method.

The final item within communication methods derived the researchers’ attention to a serious issue; when nurses were given the chance to select a usage for a device that could sign to the patient, more than half of them reported that they would use it to ask their D&HH patients if they want interpreters and although almost half reported that they would use it to talk about bedside cares, the response of asking about interpretation service indicated that they might be uncomfortable in dealing with deaf patients directly! N. Chareiro and his colleges in 2009 studied the non-verbal communication with deaf patients and suggested that both physicians and nurses need to put some efforts to enhance communication with deaf individuals besides using interpretation service since that would have positive impact on the care level [11]. That leads the discussion to the final dimension in the current study which was the usage of interpretation service; about half of the participants have experienced times when they needed this service but it was not available while less than one third of the study sample had used interpreters throughout their career but more than half reported that they were able to

communicate before the interpreter has arrived which proves the significance of acquiring certain skills from the side of health care providers to provide more effective care.

V. Conclusion

This study attempted to describe patient-nurses-relationship within deaf and hard of hearing population D&HH; it described nurses' skills in communicating with D&HH patients; communication methods that nurses prefer to use with those patients and the availability and usage of interpretation services at hospitals. The findings indicated a crucial situation within health organizations in regard to caring for individuals with special needs as lack of hearing whose condition requires certain skills and knowledge to deal with. The responses reported by the study sample indicated limitations in communication skills and knowledge beside shortages in communication methods including specialized interpreters. In conclusion, there is an urgent need to enhance nurses' skills in communicating with deaf and hard of hearing patients and to improve communication methods applied in health service organizations.

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