

IMPACT OF LANGUAGE BARRIER ON QUALITY OF NURSING CARE AT ARMED FORCES HOSPITALS, TAIF, SAUDI ARABIA

Sameer Al-Harasis

Correspondence:

Sameer Al-Harasis, BSN, RN ,Diploma (Nurse Tutor)
Nursing Clinical Instructor, Armed Forces Hospitals,
Taif, Saudi Arabia

Email: shrasis1967@yahoo.com

Introduction

Since Saudi Arabia has a shortage of nursing staff, it depends on expatriate nurses from foreign countries mainly the Philippines, India, Malaysia and South Africa. Nurses who came from these countries are non Arabic speaking resulting in difficulties in communication between nurses and patients as well as between nurses and medical staff from other nationalities. Consequently, these communication problems may affect patient satisfaction or at the worst may lead to medical errors.

A study conducted in the United Kingdom in 1999 (1) showed that language barriers may increase the likelihood that a patient would not return to the same institution for future care (1). In the United States in 2000, another study showed an association between language barriers and actual follow-up appointments (2). Patient compliance is another issue that emerges from the literature as affected by language access. Patients who have more difficulty understanding their physician or nurse would be less likely to follow treatment directions, and this is not only due to the obvious difficulties in obtaining accurate information, but also because good communication can be a source of motivation, reassurance and support, as well as an opportunity to clarify expectations (3).

Discussing the issue of language barriers is more important for nurses as they are the only personnel at the patients bedside twenty four hours a day, seven days a week.

A study in the United States covered eleven Boston area ambulatory clinics in 2000 showed that language barriers may play a role in outpatient drug complications, which in turn is related to lower patient satisfaction. Multiple regression analysis of the

Abstract

Since Saudi Arabia has a shortage of nursing staff and depends on expatriate nurses, difficulties in communication because of language barriers may affect patient satisfaction or at the worst may lead to healthcare errors. Objectives: To determine the effect of language barriers on quality of nursing care at Taif Armed Forces Hospitals and to suggest possible interventions to mitigate the effect of language barriers on quality of nursing care. Methods: This study was conducted in Armed Forces Hospitals, Taif Region. Two different questionnaires were applied (one for nurses in English and the other for admitted patients in Arabic). Total number of respondents was 343 nurses. Results: Forty-nine percent of the nurses reported they have difficulty in dealing with patients because of the language barrier. Healthcare outcomes that were affected because of language barriers include general nursing care, understanding patients' needs, communication with patients, healthcare errors, having trust in nursing care and feeling satisfaction). An equal percentage of nurses

and patients (90% and 89.5%, respectively) suggested that attending an Arabic course during the orientation period is very essential. Conclusion: Future research is required to determine the effectiveness of suggested interventions (e.g., Arabic language courses, bilingual staff, common words dictionary, etc) and their impact on improving communication (i.e., access to care), change behaviors (i.e., health outcomes), and ultimately reduce diseases. Moreover, it is necessary to view the language barrier through a cultural competency model.

Key words: language, barriers, nurses

same study revealed that having a primary language other than English or Spanish was an independent predictor of patient reported drug complications, along with the number of medical problems and failure to have side effects explained before treatment. The level of overall satisfaction was significantly lower among patients who reported problems related to medication use than among those who did not (4).

An interview study in an Australian children's Hospital of parents of Chinese immigrants presenting to the emergency department, where interviews were conducted in English, language barriers and insufficiency of linguistic access services are significant barriers to care (5).

So it is very important for those working in the healthcare field and for the decision makers to conduct and support studies that reveal the impact of language barriers on nursing care and to look for solutions to overcome drawbacks of this problem on quality of healthcare and patient satisfaction.

Thus this study was conducted to assess the impact of language barriers on quality of nursing care at Armed Forces Hospitals, Taif, Saudi Arabia and to suggest possible interventions to overcome the effect of language barriers on quality of nursing care.

Materials and Methods

This study was conducted during the period from April - December 2009 in Armed Forces Hospitals, Taif, Saudi Arabia. These hospitals consist of 3 main hospitals (i.e., AlHada, Prince Mansour and Prince Sultan Hospital) in addition to the Rehabilitation center. They are serving military personnel and their families at Taif region.

The study included all nurses working at these hospitals with a total of 385 nurses distributed in different hospitals. All nurses who are working at Armed forces hospitals and have at least one year

experience of work in Saudi Arabia at the beginning of the study were invited to voluntarily participate (n= 360).

A predestined self reporting questionnaire was applied to all participants. The questionnaire was provided in English language (the language used by all foreign nurses). It included socio-demographic information, work experience in and out of Saudi Arabia, level of reading, writing, speaking and understanding Arabic, English and other languages, training experiences in the Arabic language, their attitudes towards impact of language barrier on quality of healthcare, their experiences of problems associated with language barriers and their suggestions to solve the problem.

Another simple questionnaire was distributed to 227 inpatients already present during the study period. The questionnaire was in Arabic language and was administered through interview with the patients. It included questions about the age and level of education in addition to questions about their assessment of the magnitude of the language barrier and its relation to the communication difficulties with the nursing staff as well its relation to their satisfaction of the healthcare provided.

Approval of the Research and Ethics committee of the Armed Forces Hospitals, Taif, Saudi Arabia was obtained to conduct the study.

Results

This study included 343 nurses with a response rate of 96% and 227 patients with a response rate of 88%.

The majority of nurses were female (92.7%). There were 58.9% with nursing high school education, 37.9% bachelor degree in nursing and only 3.2% with master degree in nursing. The overall experience in nursing was almost equally distributed in the following groups: less than 5 years, 5-10 years and

more than 10 years of nursing. More than half of the participating nurses (56%) have 2-5 years of work in Saudi Arabia including their work at Taif Armed Forces Hospitals, however, about 20% either had 1-2 years or more than 5 years of work in Saudi Arabia (Table 1 - opposite page).

Regarding patients, there were 120 males out of 227 patients (55%) and there were 71% among them having less than university education.

Forty-nine percent of the nurses reported they have difficulty in dealing with patients because of the language barrier (Table 1).

Regarding Arabic language knowledge, self-report of the participating nurses revealed that they cannot read or write at all (68.8% or 70%, respectively). However, 98.5% were either completely (33.8%) or a little (64.7%) able to speak and 99.7% were either completely (39.1%) or little (60.6%) able to understand the Arabic language (Figure 1).

Almost one fifth of the participating nurses think that healthcare outcomes (i.e., nursing care, understanding patients' needs, communication, healthcare errors, having trust in nursing care and feeling satisfaction) are USUALLY or ALWAYS affected because of language barriers (median is 22.4%). However, more than half of the nurses think that the reported healthcare outcomes are SOMETIMES affected because of language barriers (median is 55.8%) (Table 2 - page 20).

Knowledge of participating nurses about the Arabic language was estimated using scores 0, 1, 2 for no, little and yes knowledge of reading, writing, speaking and understanding as reported by the nurses. It was found that 40.3% of those who have less than average Arabic language score have experienced questioning because of language barriers compared to 29.9% among those who have above average score ($p=0.05$) (Figure 2).

Table 1: Socio-demographic characteristics of the participating nurses

Variables	N (%)
Sex;	
Male	318 (92.7)
Female	25 (7.3)
Level of Education;	
High school nursing	202 (58.9)
Bachelor degree	130 (37.9)
Master degree	11 (3.2)
Overall years of experience;	
Less than 5 years	136 (39.7)
5 – 10 years	97 (28.3)
More than 10 years	110 (32.1)
Total years of work in Saudi Arabia;	
1 – less than 2 years	73 (21.3)
2 – 5 years	192 (56.0)
More than 5 years	78 (22.7)
Do you find difficulty in dealing with Arabic speaking patients;	
Yes	322 (94.0)
No	21 (6.0)

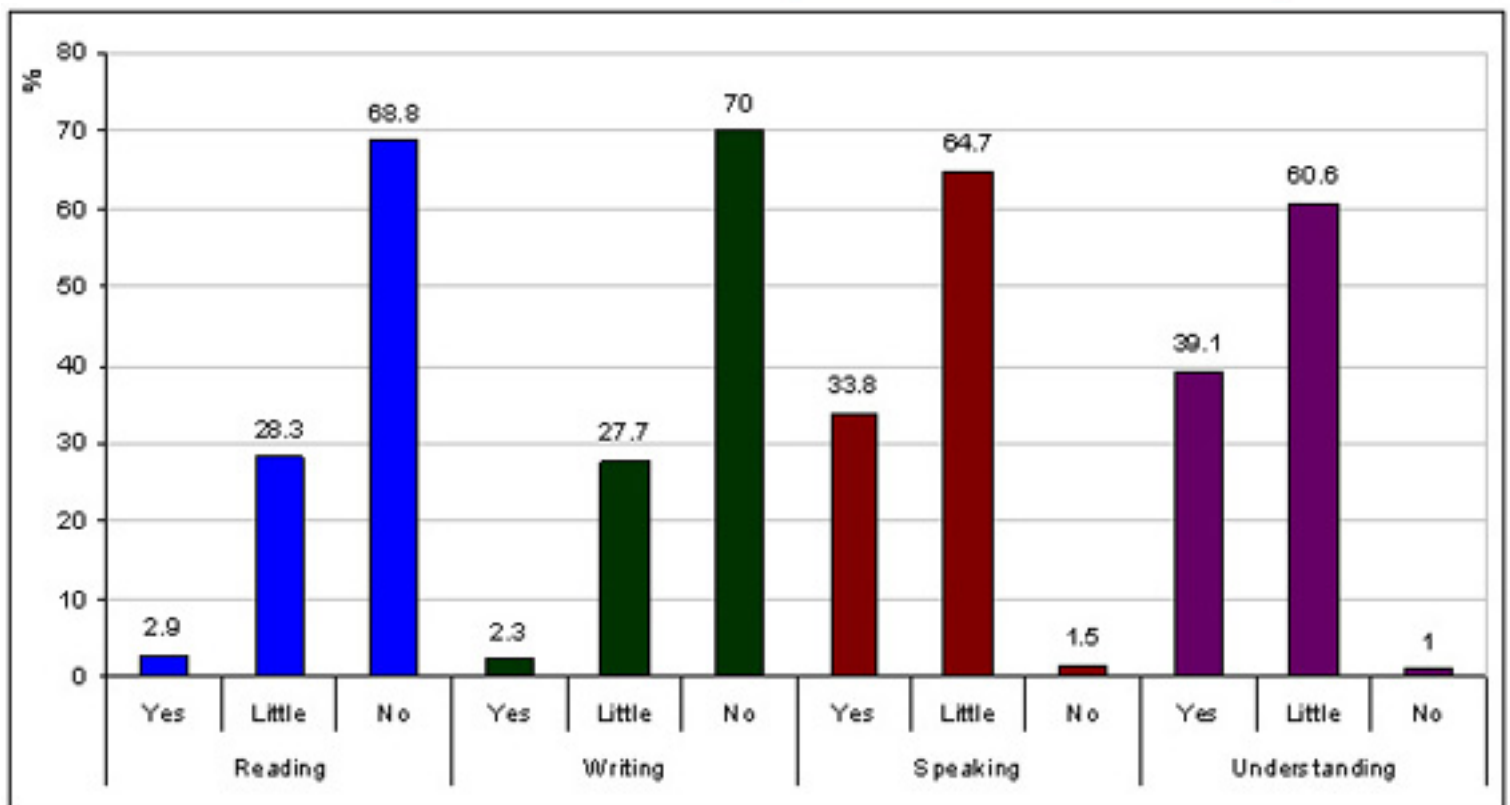
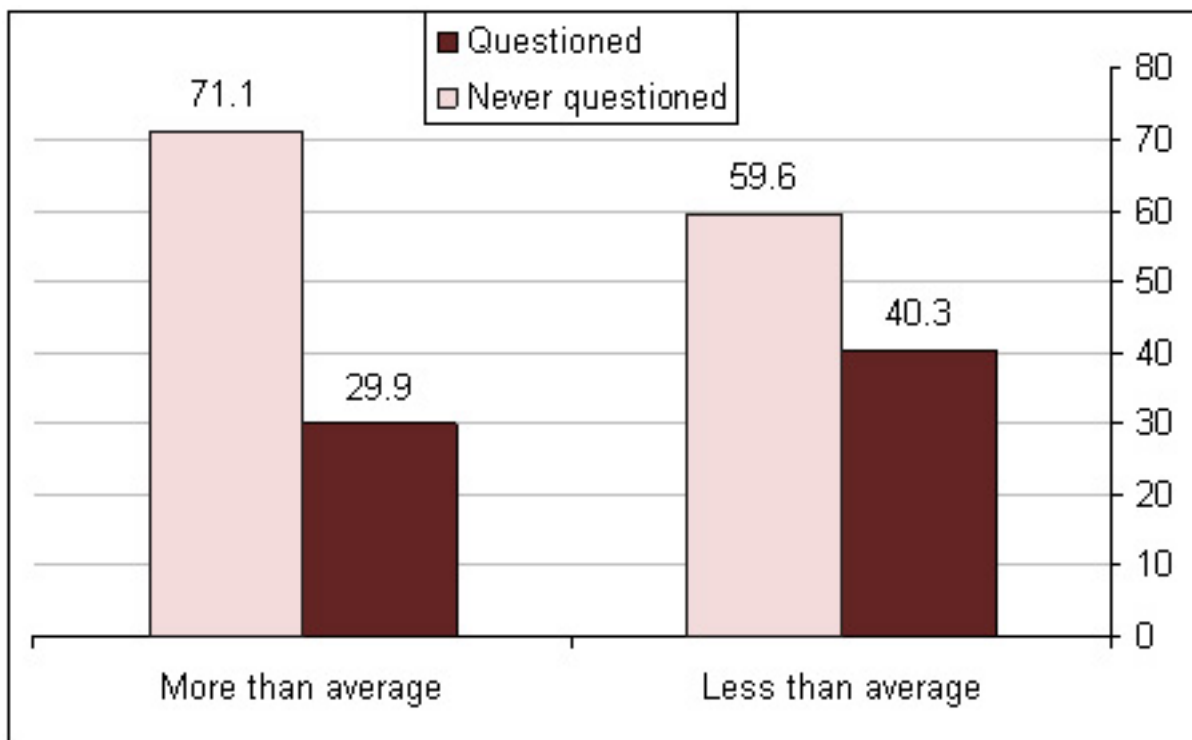


Figure 1. Level of reading, writing, speaking and understanding the Arabic language

Healthcare outcomes	Never N(%)	Rare N(%)	Sometimes N(%)	Usual/Always N(%)	P value
1. Nursing care	45 (13.1)	17 (5.0)	151 (44.0)	130 (37.9)	0.001
2. Delay in nursing care	52 (15.2)	14 (4.1)	182 (53.0)	95 (27.7)	0.001
3. Understanding of patient needs	27 (7.9)	13 (3.7)	226 (66.0)	77 (22.4)	0.001
4. Communication with patients	24 (7.0)	21 (6.1)	211 (61.5)	87 (25.4)	0.001
5. Healthcare errors	93 (27.0)	55 (16.0)	145 (42.2)	50 (14.8)	0.001
6. Trust with patients	58 (17.0)	20 (5.7)	191 (55.8)	74 (21.5)	0.001
6. Nurses' job satisfaction	75 (21.8)	24 (6.7)	194 (56.6)	50 (14.6)	0.001

Table 2: Do you think language barrier can affect / lead to the following healthcare outcomes?



More than average (n= 250) and less than average (n= 93); p value = 0.05

Figure 2: Previous experience of questioning because of problem / mistake related language barrier according to level of Arabic language knowledge

Among patients, there were 33.2 and 26% who reported communication difficulties and decreasing satisfaction, respectively, as usual or always experienced because of language barriers. Those who reported communication problems and decreasing satisfaction as sometimes experienced were 59.5% and 56.3%, respectively (Figure 3).

An exactly equal percentage of nurses and patients (90% and 89.5%, respectively) suggested that attending an Arabic course during the orientation period before starting work is essential. Similarly, 85% and 83.1%, respectively suggest translators in different wards to minimize language barriers. However, 94% of nurses compared

to 73.9% of patients prefer common words dictionary as a solution. About 83% of nurses compared to 64.4% of patients think that using the signal language can help in minimizing language communication difficulties. Most of the patients (87.7%) encourage having Arabic speaking nurses to overcome the problem (Figure 4).

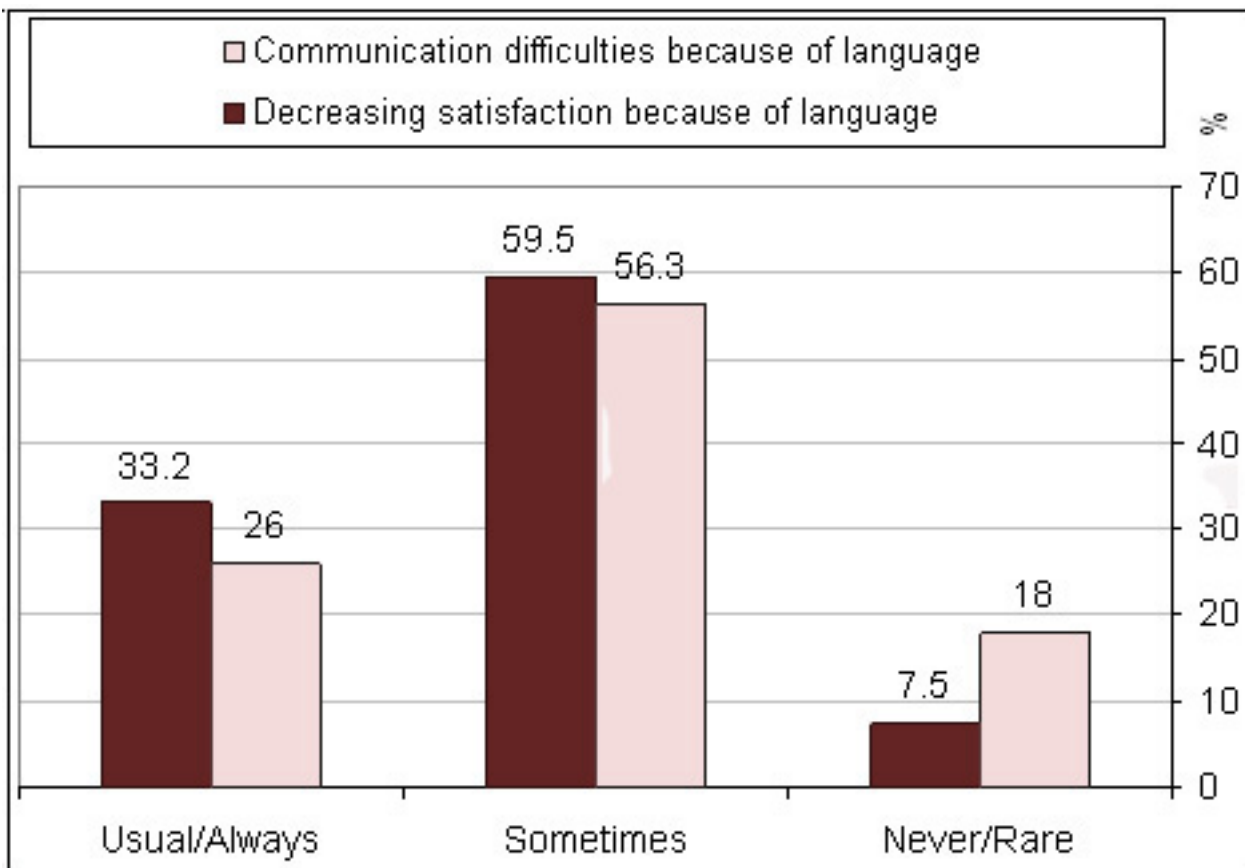


Figure 3: Communication problems and satisfaction of patients related to language barriers as reported by patients (n=227)

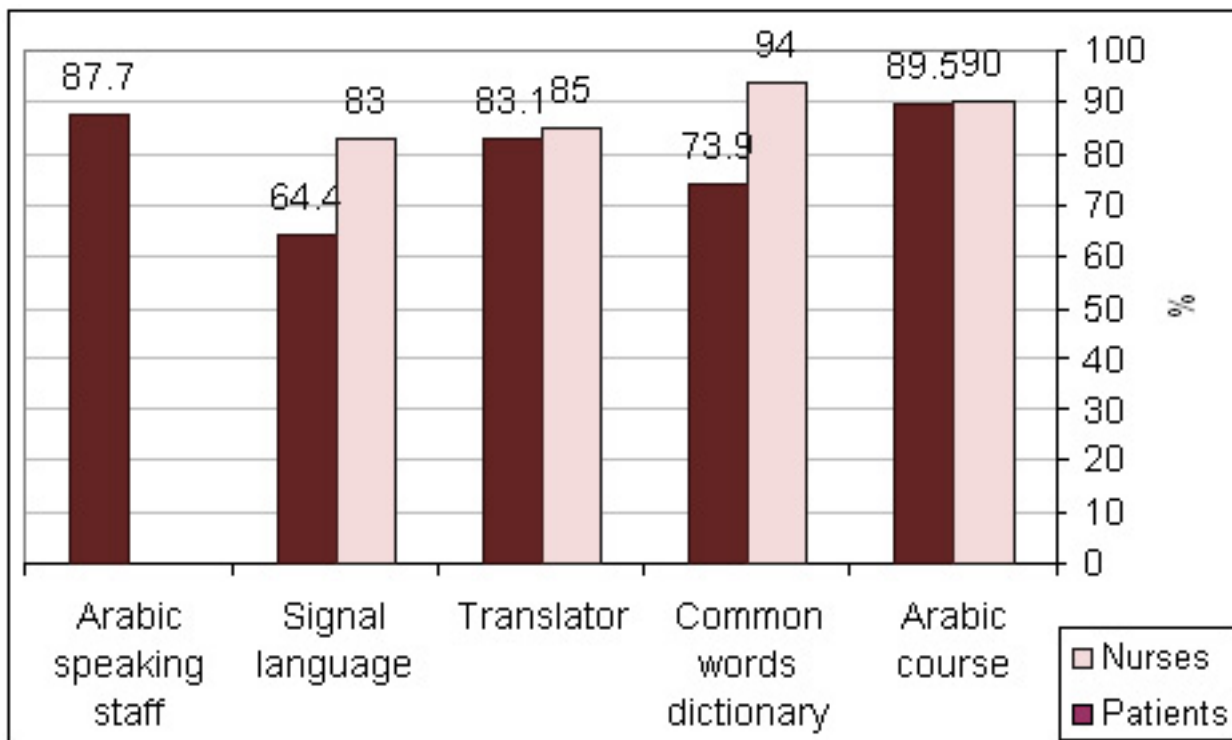


Figure 4: Suggestions of nurses and patients regarding solutions of language barriers problems

Discussion

Differences in language between healthcare providers and patients increasingly impose barriers to healthcare (5). The consequences of language barriers range from miscommunication with its drawbacks on health outcomes (6) to inefficient use or lack of access to health care services (7, 8). The current study may be the first that assesses the magnitude of language barrier as an obstacle to the healthcare system in the Arab world. Although the majority of nursing staff in the Arabic speaking gulf countries are from non-Arabic speaking countries, research that indulges this major problem are lacking. The current study revealed that the majority of working nurses find difficulty in dealing with Arabic speaking patients who represent all the patients in the facility. Moreover, most of the patients find difficulties in communication with non-Arabic speaking nurses and their overall satisfaction is affected.

The current study ranked the healthcare outcomes that may be affected because of language barriers according to nurses self-reporting. Understanding of patient needs (88.4%) was ranked first followed by general communication with patients (86.9%), quality of nursing care (81.9%), delay in nursing care (80.7%), building trust with patients (77.3%) and potential for healthcare errors (57%). Additionally, nurses reported that language barriers affect the nurses' overall job satisfaction.

A systematic review of 47 articles by Yeo (2004) (9) indicated that language barriers are associated with lack of awareness about health care benefits (such as Medicaid eligibility) (10), less insured status (7), longer visit time per clinic visit (8), less frequent clinic visits (11), less understanding of the physician's explanations (6, 12), more lab tests (7), more emergency room visits (7), less follow-up (8), and less satisfaction with health services (13, 14). As the reviewed studies were all observational causal relationship

between language barriers and quality of care could not be established.

Several studies have reported negative associations between the presence of language barriers and the number of healthcare visits (10, 11, 15). David and Rhee (1998) (6) concluded that the language barriers are correlated negatively with patient satisfaction and medication compliance.

Another literature review by Timmins (2002) (16) showed that non-English speaking populations lack access to a therapeutic relationship with their health care provider because of the language barrier. The patients are at higher risk of health problems because they do not get benefit from the available health services. According to that review, language barriers can lead to poor patient outcomes, increased use of expensive diagnostic tests, increased use of emergency room services, poor patient satisfaction and poor or no patient follow-up when follow-up is indicated.

In research study by Dunn et al (2001), (17) it was concluded that lack of time and language affected whether a discussion about cancer screening was required. It was further mentioned that screening was avoided due to lack of resources for interpretation. A similar explanation was provided by Thompson and others (2002) (18) who reported that Hispanics were much less likely than non-Hispanic whites to ever have had cancer screening in addition to other socio-demographic factors.

Morales and colleagues (1999) (14) measured dissatisfaction of patients using five observations about medical staff: (1) they listen to what patients say; (2) they give answers to questions; (3) they explain about prescribed medications; (4) they explain about medical procedures and test results; and (5) they give reassurance and support. It is worthy of notice that all these observation require a

high quality of communication and language is usually the core of good communication.

Several studies demonstrate that language barriers result in both inefficiency and potential increases in costs (7, 8). For instance, Hampers (7) indicates that patients with language barriers have significantly higher test costs (\$145 vs. \$105) and longer emergency department stays (165 minutes vs. 137 minutes) than their English-speaking counterparts. Kravitz (8) also demonstrated that Spanish- and Russian-speaking patients averaged 9.1 and 5.6 minutes longer for visits, respectively, than English-speaking patients.

Various interventions to mitigate the effect of language barriers on the quality of the provided healthcare have been suggested. Both nurses and patients in the current study agreed that administration of Arabic courses for nurses is essential (90% and 89.5%, respectively). In the US, as the problem is reversed where patients are non-English speaking, thus they suggested health education strategies for the patients who do not speak or read English at the elementary level (19). In such situations when there is a language barrier, nurses should use simple, everyday words rather than complex words or medical jargon (9).

Using nonverbal communication such as hand gestures and facial expressions has also been suggested by other researchers (6, 7, 8). The percentage of nurses who suggested nonverbal communication in the current study was higher compared to patients (83% among nurses vs. 64.4% among patients). Using a dictionary may be why that is preferred by the patients as it takes time and may not be suitable in day-to-day communication, however, for nurses they have it all the time with them and they can review commonly used words any time.

It is not only attending language classes or using non-verbal

communication; healthcare providers are encouraged to attend in-services that focus on cultural awareness, especially in Saudi Arabia where culture is different and affects health and lifestyle of the population in different ways.

As Saudi Arabia hires healthcare professionals with multicultural and multilingual backgrounds, assistance from specially trained interpreters or family members of the patients is essential to providing enhanced healthcare and culturally competent care. Having translators in different departments has been agreed upon by both nurses and patients in the current study (85% and 83.1%, respectively). The issue of who should be the interpreter, (whether that person should be a trained or untrained individual?) has been discussed by Timmins (2002) (16). An untrained interpreter (i.e., ad hoc interpreter), can lead to inaccurate communication and ethical breaches (including role conflicts and patient confidentiality). Using a family member as an interpreter may not be suitable, especially when the content is sensitive and disrupts the family relationship. Suitable interpreters as suggested by Timmins (2002) (16) include: hiring bilingual healthcare providers, hiring trained professional interpreters, training volunteer interpreters from the community and using phone interpreting.

The quality of interpretation depends on many factors including the accuracy and content of a competent medical interpretation (20). When untrained personnel are involved in interpretation the content of medical advice is often not fully understood (12) and patients are less satisfied with the health service (21).

Hiring Arabic speaking staff as an alternative is highly recommended by the patients, which needs more efforts from healthcare institutions, decision making, and community leaders to establish institutions for nursing education and to raise awareness of the community towards importance and need for Arabic speaking nurses. This requires a

long-term strategy and collaboration of different organizations.

Proper communication is essential for optimal patient care and to maintain health.

Future studies may focus on the causal relationship between language barriers and various health outcomes. Clinical trials need to be conducted to determine the effectiveness of interventions (e.g., Arabic language courses, bilingual staff, common words dictionary, etc) and their impact on improving communication (i.e., access to care), change behaviors (i.e., health outcomes), and ultimately reduce disease. Moreover, it is necessary to view the language barrier through a cultural competency model. Several conceptual models (22, 23, 24) have been developed; however, fitting these models to the Arab culture is essential or developing new fitted models.

References

1. Carrasquillo O, Ovray EJ, Brennan TA, Burstin HR. Impact of language barriers on Patient satisfaction in an emergency department. *J Gen Internal Med.* 1999;14:82-87.
2. www.hc-sc.gc.ca/hcs-sss/pubs/acces/effe-eng.php Accessed 6/4/2008.
3. Betancourt JR, Carrillo JE, Green AR. Hypertension in multicultural and minority populations: linking communication to compliance. *Curr Hypertens.* 1999. Rep., 1, 482-488.
4. Ghandi TK, Burstin HR, Cook EF. Drug complications in outpatients. *J Internal Med.* 2000;15:149-154.
5. Chak S, Nixon J, Dugdale A. Primary health care for Indo-Chinese children in Australia. *Australian ped J.* 1984;20:57-58.
6. David RA, Rhee M. The impact of language as a barrier to effective healthcare in an underserved urban Hispanic community. *Mount Sinai Journal of Medicine.* 1998; 65, 393-397.
7. Hampers LC, Cha S, Gutglass DJ, Binns HJ, Krug SE. Language barriers and resource utilization in

a pediatric emergency department. *Pediatrics.* 1999, 03(6 Pt 1), 1253-1256.

8. Kravitz RL, Helms LJ, Azari R, Antonius D, Melnikow J. Comparing the use of physician time and health care resources among patients speaking English, Spanish, and Russian. *Medical Care.* 2000, 38, 728-738.
9. Yeo Seonae. Language Barriers and Access to Care. *Annual Review of Nursing Research.* 2004, 22 (1), 2004: 59-73(15)
10. Feinberg E, Swartz K, Zaslavsky AM, Gardner J, Walker DK. Language proficiency and the enrollment of Medicaid-eligible children in publicly funded health insurance programs. *Maternal and Child Health J.* 2000, 6(1), 5-18.
11. Derose KP, Baker DW. Limited English proficiency and Latinos' use of physician services. *Medical Care Research and Review.* 2000, 57(1), 76-91.
12. Gerrish K. The nature and effect of communication difficulties arising from interactions between district nurses and South Asian patients and their carers. *Journal of Advanced Nursing.* 2001, 33, 566-574.
13. Meredith L, Stewart M, Brown JB. Patient-centered communication scoring method report on nine coded interviews [Comment]. *Health Communication.* 2001, 13(1), 19-31.
14. Morales LS, Cunningham WE, Brown JA, Liu H, Hays RD. Are Latinos less satisfied with communication by health care providers? *Journal of General Internal Medicine.* 1999, 14, 409-417.
15. Jacobs EA, Lauderdale DS, Meltzer D, Shorey JM, Levinson W, Thisted RA. Impact of interpreter services on delivery of health care to limited-English-proficient patients. *Journal of General Internal Medicine.* 2001, 16, 468-474.
16. Timmins CL. The impact of language barriers on the health care of Latinos in the United States: A review of the literature and guidelines for practice. *Journal of Midwifery and Women's Health.* 2002, 47(2), 80-90.

17. Dunn AS, Shridharani KV, LouW, Bernstein J, Horowitz CR. (2001). Physician-patient discussions of controversial cancer screening tests. *American J Prev Med.* 2001, 20(2),130-133.
18. Thompson B, Coronado GD, Solomon CC, McClerran DF, Neuhouser ML, Feng Z. Cancer prevention behaviors and socioeconomic status among Hispanics and non Hispanic Whites in a rural population in the United States. *Cancer Causes & Control.* 2002, 13, 719-728.
19. Aboul-Enein FH, Ahmed F. How language barriers impact patient care: a commentary. *Journal of Cultural Diversity.* Fall 2006, 13 (3): 168-9.
20. Woloshin S, Schwartz LM, Katz SJ, Welch HG. Is language a barrier to the use of preventive services? *Journal of General Internal Medicine.* 1997,12, 472-477.
21. Lee LJ, Batal HA, Maselli JH, Kutner JS. Effect of Spanish interpretation method on patient satisfaction in an urban walk-in clinic. *Journal of General Internal Medicine.* 2002, 17, 641-645.
22. Brach C, Fraser I. Can cultural competency reduce racial and ethnic health disparities? A review and conceptual model. *Medical Care Research and Review.* 2000,57(Suppl 1), 181-217.
23. Andersen RM. Revisiting the behavioral model and access to medical care: Does it matter? *J Health and Social Behavior.* 1995, 36(1), 1-10.
24. Andersen RM, Rice TM, Kominski GF. Changing the U.S. health care system: Key issues in health services, policy, and management. San Francisco: Jossey-Bass. 2001.