

***Education-Family Physician Corner***

**Clients' Satisfaction with Triage Nurse in Primary Health Care**

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**Objective: To assess the level of client's satisfaction with primary health care services delivered by a triage nurse.**

**Design: A Descriptive Cross-Sectional Study.**

**Setting: Five Primary Health Care Centers, Bahrain.**

**Method: Three hundred eighty-five clients attending triage nurse clinic in five primary health care centers that run the triage system in Bahrain were interviewed in the first two weeks of June 2011. Modified Nurse Practitioner Satisfaction Survey (NPSS) was used.**

**Result: Three hundred sixty-two (94.03%) were generally satisfied, while 367 (95.3%) were satisfied with triage nurse communication. Despite high levels of satisfaction with the triage service, clients would rather prefer to see their regular physician.**

**Conclusion: After five years of introduction of triage nurses to primary health care centers, clients were highly satisfied with triage nurse. Therefore, it might be worthwhile to implement triage nurse services in all primary health care centers in Bahrain.**

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In primary care setting, triage system run by nurse practitioners was introduced in many countries for reduction of physicians' load, for better utilization of resources and better time management.

The role of the triage nurse practitioner involves receiving clients with undiagnosed, undifferentiated problems, making an assessment of their health needs based on nursing knowledge and skills, including physical examination where appropriate, and making decisions as to management of the client's problem, including self-care, referral to GP, clinical investigations, treatment decisions and discharge from the health care system<sup>1</sup>.

In Bahrain, the first clinic run by nurses was introduced in 1994<sup>2</sup>. A community nurse practitioner (CNP) is an experienced nurse who had been trained to have an expanded role. CNP used to see clients and prescribe medications. However, this project was stopped for some legal issues.

In 2003, another project was conducted in East Riffa Health Center for six months<sup>3</sup>. It aimed to expand the role of nurses in primary health care and to incorporate them in the medical management of simple cases. Two nurses were chosen to lead nurse-led clinic called 'Filtering Room' for clients attending health centers.

In February 2006, the same concept was re-introduced by initiating the 'triage clinic' in Sheikh Sabah Health Center. Unlike nurse practitioners, triage nurses were not authorized to prescribe any medications. By February 2010, triage clinics were implemented in 13 health centers. Employing a nurse practitioner in primary care is likely to cost much the same as employing a physician<sup>1,4-7</sup>. Moreover, a randomized controlled trial showed that adding nurse practitioners to general practice teams did not reduce the workload of general practitioners, at least in the short term<sup>8</sup>.

Systematic review of randomized controlled trials and prospective observational studies comparing clients' satisfaction towards nurse practitioner to clients' satisfaction towards physician in primary care settings showed that clients were more satisfied with nurse practitioner<sup>4-8</sup>.

In Bahrain, a study was done to describe the potential role of nurses<sup>3</sup>. A hundred randomly selected clients were asked about their satisfaction toward the services provided to them, and 83% were satisfied.

The aim of this study is to assess the level of client satisfaction with primary health care services delivered by a triage nurse.

## **METHOD**

Non-random sampling was performed on 385 clients attending five primary health care centers in May 2011. Informed consent was obtained from each client before the interview. A validated and reliable questionnaire (NPSS) was adopted from previous studies used in the interview.

**Inclusion Criteria:** All clients who attended the primary health care centers for consultation and were assigned to see a triage nurse. Clients who did not speak Arabic or English and below 12 years and were not accompanied by adults were excluded.

Data was analyzed using SPSS version 18. The difference between variables was analyzed using omnibus chi-square. Direct logistic regression analysis was used to evaluate independent variable, P value <0.05 was considered significant.

## **RESULT**

Two hundred twenty-four (58.2%) clients were aged 20 to 39, 206 (53.5%) were females, 317 (82.3%) were Bahrainis, 245 (63.6%) were married, 193 (50.13%) were employed and 167 (43.4%) had completed high school, see table 1.

**Table 1: Personal Characteristics of Clients Seeking Seeing Triage Nurse**

<b>Independent Variables</b>	<b>Frequency</b>	
<b>Age</b>	<20 years	62 (16.1%)
	20-39 years	224 (58.2%)
	40-59 years	91 (23.6%)
	≥60 years	8 (2.1%)
	<b>Total</b>	<b>385 (100%)</b>
<b>Gender</b>	Male	179 (46.5%)
	Female	206 (53.5%)
	<b>Total</b>	<b>385 (100%)</b>
<b>Nationality</b>	Bahraini	317 (82.3%)
	Non-Bahraini	68 (17.7%)
	<b>Total</b>	<b>385 (100%)</b>
<b>Marital status</b>	Single	125 (32.5%)
	Married	245 (63.6%)
	Divorced	9 (2.3%)
	Widowed	6 (1.6%)
	<b>Total</b>	<b>385 (100%)</b>
<b>Highest educational level completed</b>	Illiterate	5 (1.3%)
	Intermediate school or less	69 (17.9%)
	High school	167 (43.4%)
	University college or higher	144 (37.4%)
	<b>Total</b>	<b>385 (100%)</b>
<b>Employment status</b>	Student	69 (17.92%)
	Unemployed	99 (25.71%)
	Employed	193 (50.13%)
	Retired	24 (6.23%)
	<b>Total</b>	<b>385 (100%)</b>
<b>Subjective client report of degree of illness necessitating the client's desire to seek medical attention</b>	Not ill	104 (27%)
	A Little ill	127 (33%)
	Moderately ill	107 (27.8%)
	Very ill	47 (12.2%)
	<b>Total</b>	<b>385 (100%)</b>
<b>Healthcare provider type with whom the client has been most satisfied</b>	Triage Nurse	267 (69.4%)
	Physician	118 (30.6%)
	<b>Total</b>	<b>385 (100%)</b>
<b>Client's perception of the provider type providing the best health education</b>	Triage nurse	133 (34.5%)
	Physician	252 (65.5%)
	<b>Total</b>	<b>385 (100%)</b>
<b>Client preference to see a physician in the same consultation</b>	No	148 (38.4%)
	Yes	237 (61.6%)
	<b>Total</b>	<b>385 (100%)</b>
<b>Client preference to see a physician in the next consultation</b>	Triage nurse	165 (42.9%)
	Physician	220 (57.1%)
	<b>Total</b>	<b>385 (100%)</b>
<b>Number of times in the past year the client has seen the triage nurse</b>	0-5	281 (73%)
	6-10	63 (16.4%)
	11-15	15 (3.9%)
	16 or more	26 (6.8%)
	<b>Total</b>	<b>385 (100%)</b>
<b>Presence of chronic health problem(s)</b>	No Chronic disease	253 (65.7%)
	Having one or more chronic disease	132 (34.3%)
	<b>Total</b>	<b>385 (100%)</b>

Two hundred sixty-seven (69.4%) clients were satisfied with triage nurse. Two hundred thirty-seven (61.6%) preferred to see physician in the first visit, 220 (57.1%) preferred to see physician in the next visit. One hundred thirty-two (34.3%) clients with chronic disease were seen by triage nurse in present visit.

In addition, 231 (60%) described their degree of illness as “Not ill” or “A little ill”, and from their past experience, 267 (69.4%) were more satisfied with the triage nurse; although, 252 (65.5%) were more satisfied with the physician in providing health education. Two hundred eighty-one (73%) reported 0-5 visits to triage nurse in the past year, and 253 (65.7%) had no chronic illnesses, see table 1.

The following groups had higher general satisfaction scores than others: clients less than 20 years old, males, Bahrainis, single, students, intermediate education or less, those who had previous experience with triage nurse, clients who described their degree of illness as “not ill”, and clients having no chronic diseases.

## **DISCUSSION**

The population studied demonstrated an overall high level of satisfaction with primary health care services delivered by a triage nurse. Overall, 94.03% were satisfied compared to the previous study with client satisfaction of 83%. Clients were also satisfied with triage nurse communication (means range from 3.89-4.12).

A positive past experience with triage nurses affected clients’ satisfaction in a positive manner. Client preference of health care provider to be seen in the same or next consultation had a strong association with their satisfaction level.

Most clients were uncertain if the triage nurse discussed methods other than medication to treat their problems.

Initially, we expected that our situation in Bahrain was different from other countries because of the different cultural expectations, different system organization and nurse’s training and qualification compared to other countries<sup>1,9</sup>. However, the satisfaction level towards triage nurses in Bahrain was parallel to that of nurse practitioners in other studies<sup>4-8</sup>.

There was an obvious contradiction between clients’ satisfaction and their preference. Despite high levels of clients’ satisfaction with the triage nurse, they would still prefer to see their regular physician.

## **CONCLUSION**

**After five years of introduction of triage nurses to primary health centers, clients were highly satisfied with triage nurse. Therefore, it is worthwhile to implement triage nurse services in all health centers and to make it a precondition for the nurse to attain master degree. Further research is needed to include all the health centers.**

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