

Research Article

Client's Satisfaction in Toward COVID Vaccination Services in Namas District- Saudi Arabia

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Abstract

Background: The degree of client satisfaction will demonstrate whether the appropriate vaccination services are provided at the appropriate time, in the appropriate location, in the appropriate manner, and by the appropriate staff.

Aim: The study aimed to assess client's satisfaction toward COVID Vaccination services at Namas district.

Design: Descriptive study designed was done. Settings; Study was conducted in Nishan health center located in Al Namas.

Subjects: Random sample of 402 clients attending to receive COVID vaccination.

Tool: One tool used to collect the information from the client, and it consists of (2) parts: Socio-demographic data and satisfaction questionnaire.

Results: Clients were satisfied with accessibility at 60%, the humanness of the staff at 57.7%, and the comprehensiveness of care at 52.7% while they were unsatisfied with the physical environment of the facility at 43.3%, and health education received 56%.

Conclusion & Recommendations: The satisfaction of the participant is relatively more among the attendants. The physical environment and health education dimension have the least satisfaction scores. client satisfaction differs significantly regarding the education, occupation, and utilization rate of the participants. Based on the results of this study, the following recommendations are suggested Planning of intervention programs to improve doctor/ nurse-client interaction.

Keywords: Client satisfaction; COVID vaccination; Primary health care

Introduction

vaccination continues to reduce the prevalence of avoidable diseases, and vaccine safety is becoming increasingly important especially during COVID pandemic [1,2]. Because COVID vaccinations are frequently given to healthy people, monitoring is required to maintain public confidence. In most countries, monitoring has depended on passive surveillance methods such as the vaccine adverse event reporting system [1-4]. The need for improved pharmaceutical product monitoring has become increasingly recognized. COVID vaccination are beneficial to people of all ages because they help the immune system fight germs and viruses that might cause serious disease or death. [5,6]. COVID vaccination are administered in many doses over time [7]. Some companies have occupational health nurses who can administer vaccines in accordance with employer standards and recommendations. When a child is registered for day care, preschool, school, or certain programs at a post-secondary institution, his or her immunization record is frequently requested [3]. To increase motivation, planners must

collaborate with local leaders and offer community people with a greater understanding of vaccination during pandemic. Many parents are just unmotivated to have their children immunize because of misunderstandings and negative attitudes, both of which contribute to low acceptability and a high drop-out rate [4,5]. Healthcare Workers must first have a thorough understanding of immunization before focusing on teaching the community about what it is and why it is so vital. It is important that quality improvement, including client satisfaction with vaccination services, be carefully led, and ensured by frequent auditing of the immunization chain [9]. The most common reason given by caregivers in settings where children were not immunized during the national immunization coverage survey was a lack of vaccines at health facilities, followed by vaccination services that were too far away, and a lack of awareness of need sites care system in the country, gaps in health workers skills, and weaknesses in data collection and analysis have been identified as some of the challenges [10]. The degree of client satisfaction will demonstrate whether the appropriate vaccination services are provided at the appropriate time, in the appropriate location, in the appropriate manner, and by the appropriate staff. This will serve as a benchmark for evaluating quality improvement measures, with the goal of increasing vaccination coverage in the country [13]. A complete immunization policy should be developed by any medical facility or health department that provides direct patient care. Access, utilization, availability, and coverage are all terms that are used interchangeably to describe whether or not people are obtaining the services they require [14]. Long wait times are a well-known barrier to client satisfaction and, as a result, immunization service use [15].

Aim of the study

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The study aimed to assess client's satisfaction toward COVID Vaccination services at Namas district.

Research question

- What are the level of Clients Satisfaction toward COVID vaccination services at Namas district.
- Are there relation between clients satisfaction and their socio-demographic characteristics?

Subject and Methods

Study design

Descriptive study designed was done to achieve study goals.

Setting and participants

Study was conducted in Nishan health center located in King Faisal Road, 67395, Al Namas which centralize the city beside the services building of the city, with good available transportation. there were six days for receiving the COVID vaccination service with 50 to 75 average daily attendance. The participants are the Clients who attended to Nishan primary health center for receiving COVID vaccination over the period six months.

Study sample

The study sample included all 402 clients who were Saudi clients attending Nishan primary care center for COVID vaccination between September 2021 and February 2022, completed an interview about satisfaction about the vaccination service.

Sample size determination

Sample size determination for single population proportion Sample size (n) was determined based on the single population proportion formula and assumption of 39% prevalence (six months performance achievement report of PHC at Nishan Health center). Expected margin of error (d) is of 0.05 and with 95% confidence level ($Z_{\alpha/2}$) and 10% contingency for non-response.

Thus,

$$n = (Z_{\alpha/2})^2 * P (1 - P) / d^2$$

$$n = (1.96)^2 * 0.39 (1-0.39)/0.05^2$$

$$n = 366 + 36 (10\% \text{ contingency}) n = 402$$

Tools for data collection

A structured interviewing questionnaire was used to data collection: An Arabic language questionnaire was used in this study, in which all participants were interviewed once. The questionnaire was administrated by two Arabic-speaking people, a trained interviewer, and second author. It was used one tool to collect the information from the client, and it consists of (2) parts:

Part (1): Socio-demographic data as age, education level, residence, and occupation.

Part (2): to determined client satisfaction level toward COVID vaccination services at Namas district, the researchers was using satisfaction questionnaire by Makhdoom used in North America, European and Arab united Emarat surveys [13]. The satisfaction questionnaire covers the standard domain were accessibility to services (seven items), physical environment (six items), humaneness of staff (eight items), comprehensiveness of care (five items), and health education services (eight items). For each of these domains, Makhdoom et al., developed new questions based on published

literature concerning patient satisfaction, in particular the paper by Carr-Hill. These questions were then translated into Arabic, which was verified by back translation performed by a different bilingual person who had not seen the original English language version. Any areas of disagreement in the translation were resolved by discussion between both translators and research team. Makhdoom reported that face validity was obtained from discussions with five family, community medicine consultants, while reliability was 83% for split-half testing. Each item was scored using three-point Likert scale; agree, do not know, disagree, overall satisfaction was defined as the average score for six measured domains of satisfaction.

Filed of work

The actual fieldwork started from September 2021 and February 2022, and data collection was carried out through six months in the period of beginning the program. It started by interviewing the participant study subjects who agreed to participate in a teaching to participate in our study at the above mentioned setting the researchers started by introducing herself to the participant studied subject.

Data analysis

Data was collected; coded and analyzed using (SPSS) program and appropriate statistical tests were used. - Quantitative data are presented as mean \pm standard deviation and Qualitative data are presented as number and percentage.

Ethical consideration

Administrative approval for conducting this research was obtained then the permission from the authorities of the health unit included in the study was collected. Assuring confidentiality of information, data collected was anonymous. Subjects were informed about the study objectives and procedures. Verbal consents were obtained from all participants.

Results

The details of sociodemographic characteristics of clients in present study 77.3% were males and 36.4 % aged from 20-24. Table 1 founded also 39.9% of clients have secondary educational level and 22.7% not working. Two thirds 60.5% of them were married and more half of clients used public transportation when going to health center to received COVID vaccination. The Figure 1 shows that the nationality of the participants in the study, 52% of Saudi nationalities and 48% of other nationalities, but residing in Saudi Arabia. Table 2; revealed clients were satisfied with accessibility 60%, the humanness of the staff 57.7%, and the comprehensiveness of care 52.7% while they were unsatisfied with the physical environment of the facility 43.3% and health education received 56%. This Figure 2 revealed clients were satisfied 46.3%from covid vaccination services and 53.7% unsatisfied from services. It was observed that 216 clients are satisfied with the provided service constituting a 53.5% satisfaction rate. Most of the satisfied were aged 20-24 (36.0%), secondary educated (37.9%), worker 76.2%, and using public transport to reach the health facility 56.5%. There were statistically significant differences between satisfied and unsatisfied women regarding education and occupation and insignificant differences regarding age and method of arrival (Table 3).

Discussion

The assessment of client satisfaction measurement has become an administrative and a practical reality. Government agencies, professional bodies, and numerous health care certification and

Table 1: Distribution of clients according to their Socio-demographic characteristics (N=402).

Socio-demographic	No	%
Age		
- >20	24	5.9
- 20-24	146	36.4
- 25-29	127	31.5
- 30-34	66	16.4
- ≥35	39	9.7
Range:	19-58	
Mean±SD	29.047±6.362	
Sex:		
Male	311	77.3
Female	91	22.7
Marital status:		
Single	131	32.5
Married	243	60.5
Widow	17	4.3
Divorce	10	2.5
Education level:		
Illiterate	63	15.6
Primary	27	6.8
Intermediate	93	23.2
Secondary	158	39.3
University	61	15.1
Occupation:		
- Worker	311	77.3
- Not-working	91	22.7
Method of arrival		
- Walking	169	42
- Public transport	216	53.7
- Own car	17	4.2

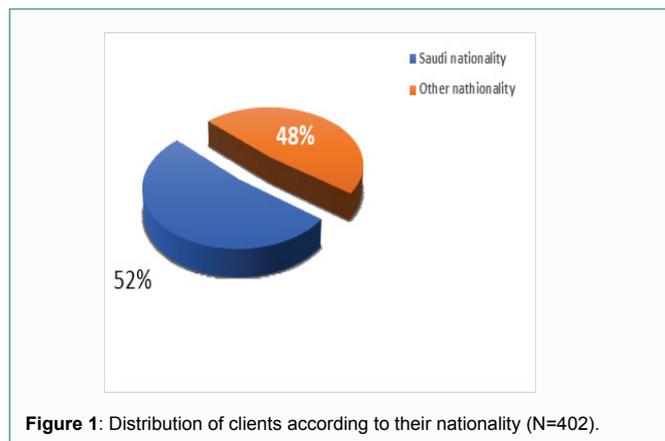


Figure 1: Distribution of clients according to their nationality (N=402).

Table 2: Client's satisfaction according to dimensions of provided service (n=402).

Satisfaction dimensions	Satisfied		Unsatisfied	
	No	%	No	%
Accessibility	233	60	169	40
Physical environment	213	53	189	47
Humanness of staff	228	57.7	174	43.3
Comprehensiveness of care	212	52.7	190	46.3
Health education	177	44	225	56

**** Highly significant**

standardization authorities expect attempts to measure patient satisfaction and the results to be examined as evaluation criteria [16]. The purpose of this, study was carried out to assess the level of clients' satisfaction towards covid vaccination services in those who attending at Namas Health center. Regarding demographic characteristics of the study sample which consisted of 402 clients ranged from 19 years to 48 years, with Mean ± SD 29.047±6.362 years. The present study referred

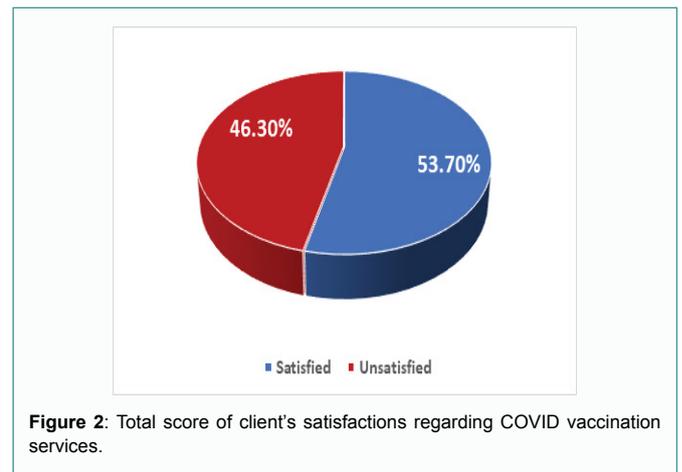


Figure 2: Total score of client's satisfactions regarding COVID vaccination services.

Table 3: Association between Client's satisfaction and their socio-demographic characters (n=402).

Socio-demographic	Satisfied (n=216)		Unsatisfied (n=186)		p-value
	No	%	No	%	
Age					
- >20	13	6.1	11	5.9	0.97
- 20-24	77	36	69	37.1	
- 25-29	70	32.7	55	29.6	
- 30-34	34	15.9	32	17.2	
- ≥35	22	9.3	19	10.2	
Education level:					
Illiterate	42	19.6	21	11.3	0.003*
Primary	15	7	12	6.5	
Intermediate	56	26.2	37	19.9	
Secondary	81	37.9	76	40.9	
University	20	9.3	40	21.5	
Occupation:					
- Worker	163	76.2	148	79	<0.001**
- Not-working	51	23.8	40	21	
Method of arrival					
- Walking	89	41.6	80	43	0.08
- Public transport	121	56.5	95	51.1	
- Own car	4	1.9	11	5.9	

that nearly half of the clients were had secondary education, nearly all of them were married, not worked, and about two thirds of them were males. This similar with Abd Allah E when studied for mothers' satisfactions about health services in Minia who revealed that the small proportions of participants were illiterate and most of them were medium or higher education. As regards client's job, the most of clients were working [17]. Although the centers' working hours are for the morning shift only, nevertheless, most of the workers are hesitant, and I see that the reason for the increase in the number of visitors to the vaccination service is because vaccination is compulsory and a condition for entering any institution in the country. The current study concerning the nationality of clients, it presents that reveals less than half of the clients have other nationalities but residing in Saudi. This similar with Lanzi when studied in Saudi Arabia who revealed that the clients participated in his study from other nationalities [18]. The results show that mode of transport that the clients used to access Namas center, either by own car, public transportation, or on foot, this means that the majority of these clients lived far from the center, this is explained through the time of traveling range the clients spent to reach Namas center was 3-120 minutes, and this may make them unsatisfied with the COVID vaccination services. This goes in the line with Rasheed N. [19] who reported that among the reasons quoted

by the clients for preferring the services of PHC, less distance from their homes emerged as common reason [20]. The present study disagrees with Mohamed who reported in her study that most of interviewed clients in the studied were about the time reach to the center, the major number from them needs less than 15 minutes [19]. The current study shows that a significant relationship between the satisfaction of clients and their socio-demographic characters. client's standards for care evaluation, or politeness bias or it may be due to actual regional variation in the quality of service provided. On the other side, many international studies found a significant relationship between the satisfaction of clients and their educational status [17,19]. Also, the occupation of the clients significantly affects their satisfaction with the provided service with less degree of satisfaction among working women. This may be due to working women are more educated with more income and high social status and consequently have high expectations. Many studies found a significant relationship between the client's income and their satisfaction with the provided service. Also, there is a significant difference between client's satisfaction regarding utilization of service where satisfied clients have more utilization rate. Utilization rate by itself is a good indicator for continuity of service and client satisfaction [13]. Many studies were conducted in Egypt [20] and other nearby countries [14,15,17,18] to assess the satisfaction among primary healthcare attendants with variable degrees of client's satisfaction and variable predictors.

Study limitations

The limitations of this study assess satisfaction for one visit while periodic surveys could be more informative to the center. Because the study was restricted to the Namas health center facilities in the Al-Namas district, we can't generalize the results of this study to other types of health services or other localities in Saudi Arabia. However, when the finding of this study is combined with the findings of other studies conducted in other areas all over Saudi, they can give a complete picture of the Covid vaccination services situation in the country. Also, response bias is probable due to what's called "halo effect". This type of bias occurs in the facility-based studies due to the immediately short-lived over-satisfaction of the clients after obtaining the service.

Conclusion

The satisfaction of the participant is relatively more among the attendants. Physical environment and health education dimension have the least satisfaction scores. client's satisfaction differs significantly regarding the education, occupation, and utilization rate of the participants. Due to the great importance of identifying client's satisfaction to improve the quality of provided vaccination service and due to variability between different studies in the satisfaction rate and its predictors, a large-scale nationwide study is needed to be the basis for any improvement efforts.

Recommendation

Based on the results of this study, the following recommendations are suggested:

- Planning of intervention programs to improve doctor/ nurse-client interaction.
- Encouraging and rewarding any health facility that fulfills a high rate of client attendance and satisfaction.
- Finally, educating individuals and communities about the importance of vaccination and preventative services.

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