

# BMJ Open Quality Experiences of Palestinian patients with hospital services: a mixed-methods study

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## ABSTRACT

**Background** This study aimed at assessing patient experiences with hospital services and key factors associated with better experiences.

**Methods** The study design is cross-sectional supported by qualitative interviews. The Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) was used as data collection instrument. A convenience sample of 391 volunteers aged  $\geq 18$  years participated in this study. Qualitative interviews were conducted with patients and healthcare providers to further enrich and explain the quantitative results.

**Results** The average age of the sample was 41.34, SD (16.4), range (18–87). Females represented 61.9% of the whole sample. Almost 75% were from the West Bank and 25% from the Gaza Strip. The majority of respondents reported that doctors and nurses were respectful, listened to them and explained clearly to them always or most of the time. Only 29.4% of respondents were given written information about the symptoms they may have after discharge from the hospital. Factors that were independently associated with higher scores on the HCAHPS scale were; being females (coef: 0.87, 95% CI: 0.157 to 1.587,  $p=0.017$ ), being healthy (coef:  $-1.58$ , 95% CI:  $-2.458$  to  $-0.706$ ,  $p=0.000$ ), being with high financial status (coef: 1.51, 95% CI: 0.437 to 2.582,  $p=0.006$ ), being from Gaza (coef: 1.45, 95% CI: 0.484 to 2.408,  $p=0.003$ ) and who visited hospitals outside of Palestine (coef: 3.37, 95% CI: 1.812 to 4.934,  $p=0.000$ ). Overcrowding, weak organisational and management processes, and inadequate supply of goods, medicines, and equipment were reported factors impeding quality services via in-depth interviews.

**Conclusions** The overall hospital experiences of Palestinian patients were moderate but varied significantly based on patients' factors such as sex, health status, financial status and residency as well as by hospital type. Hospitals in Palestine should invest more in improving their services including communications with patients, the hospital environment and communication with patients.

## INTRODUCTION

Individual experiences with the medical team, the hospital facilities, communication with healthcare workers and healthcare management, all influence patients' satisfaction. The perspectives of patients can offer crucial and comprehensive data on the overall quality of care.<sup>1</sup> These perspectives may offer essential

### WHAT IS ALREADY KNOWN ON THIS TOPIC

⇒ To the best of our knowledge, this is the first study using the Hospital Consumer Assessment of Healthcare Providers and Systems instrument in assessing patient experiences with hospital care services and key factors associated with better experiences.

### WHAT THIS STUDY ADDS

⇒ This mixed approach provided a snapshot to quality of communication with nurses and physicians and initial assessment of few structural aspects in hospitals as perceived by Palestinian patients. The results of the study emphasised the importance of patients' experiences as a crucial indicator for quality of care.

### HOW THIS STUDY MIGHT AFFECT RESEARCH, PRACTICE OR POLICY

⇒ This is significant to policy-makers and senior managers to help them properly tackle the most perceived gaps in hospital services and thus set their priorities and implementation strategies to improve the quality of inpatient care.

understanding about (1) willingness to use healthcare facilities in the future and compliance with medical instructions; (2) the standards for international accreditation and (3) the financial success and performance of healthcare facilities.<sup>2</sup> Patient experiences indicate healthcare quality and patient satisfaction. During hospitalisation, patients' satisfaction is created according to a balance between their perception and expectation.<sup>3</sup>

Patient experiences include many dimensions such as waiting time, care from admission to discharge and communication between patient and health team.<sup>4,5</sup> The technical and interpersonal skills of the health team were two core elements included in the patient appraisal to hospital services in Cameroon.<sup>6</sup> A systematic review revealed that the providers' interpersonal care and technical quality were the most influential determinants of patient satisfaction.<sup>7</sup> The facility's general amenities, including their accessibility and structural



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design, were also among the factors that impact patient satisfaction.<sup>8</sup> The facility's physical environmental such as cleanliness, parking and waiting rooms all were positively associated with patient satisfaction in the USA.<sup>9</sup> Furthermore, the patient's sociodemographic characteristics and economic situation, as well as their attitude and expectation towards the provided care and healthcare system, were among the main factors influencing the patient satisfaction.<sup>10</sup> Age, sex, educational attainment, socio-economic condition, marital status, racial or religious affiliation, geographic characteristics, frequency of visits, length of stay, health status, personality and expectations of care were all associated with patient satisfaction.<sup>7</sup>

The Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) is a well-known and widely used scale developed by the Agency for Healthcare Research and Quality (AHRQ) and supported by the Centers for Medicare and Medicaid Services in the USA.<sup>11</sup> The HCAHPS questionnaire has been used in different countries and contexts to evaluate patients' experiences with hospital care and to provide feedback for hospitals on areas that need improvement in their services.<sup>12-14</sup>

The current study aimed at evaluating Palestinian patients' experiences in the services they received at local and referred hospitals using the HCAHPS questionnaire. The study also aimed at find out whether these experiences vary by patients' characteristics such as age, sex, financial status, health status and area of residence and by hospital types (governmental, non-governmental organisations (NGOs) or hospitals outside of Palestine). The study also used qualitative interviews to enrich and explain the result of the questionnaire. There is scant research investigating hospital quality and Palestinian patients' experiences with hospital services. This is the first study to use the HCAHPS scale combined with qualitative interviews to investigate Palestinian patients' experiences with hospital services. This study will specify factors related to better patient experiences and will provide recommendations for hospitals to improve their services.

## METHODOLOGY

### Study design and setting

This study included a cross-sectional quantitative survey and qualitative interviews with 10 health professionals (7 nurses, 2 physicians and 1 physiotherapist) and 15 patients. The data collection was carried out in the West Bank and Gaza Strip between October 2021 and February 2022. The qualitative interviews aimed at complementing and enriching the quantitative findings. Ten health professionals were interviewed to compare and triangulate their perspectives with those of the patients.

### Population and sample

A convenience sample of 2165 individuals was approached of whom 1299 agreed to participate in the survey, representing 60% response rate. Of the 1299 who completed the survey, 391 went to a hospital while the rest went

to a primary healthcare clinic. The subsample of 391 respondents who had been to a hospital within the past 12 months was selected for this study. Patients who were at least 18 years old and had used a healthcare service as an inpatient in hospitals during the 12 months prior to the survey, capable and gave verbal consent to participate in this study were included. The time frame used in the HCAHPS hospital assessment in the USA is 6 weeks. We extended this time frame to 12 months because the aim of this study is research not evaluation of specific hospitals and to improve the chances of successful recruitment.

### Data collection

The quantitative part used the HCAHPS questionnaire which was translated to Arabic and back translated into English by professional translators. The coauthors (SH, MR, IN and CEJ) reviewed the questionnaire and gave comments on clarity, content and sequence of some questions. The Arabic questionnaire was pilot tested on a sample of 30 participants from the north, middle and south of Palestine. The pilot surveys were conducted by the first author who filled in the questionnaire while reading the questions in-person to the participants. Modifications were then made after each pilot based on the results and discussed with the research team.

Data collectors (male and female who held a university degree and were experienced in field data collection) were recruited and trained, then dispatched throughout the West Bank and Gaza. Data collectors recruited participants from public places, took verbal consent and filled in the questionnaire with the participants on tablets using an online link that was developed using Survey Monkey. Data collection was closely monitored by the research team through regular field visits and logical checks on the entered data. Feedback was given to data collectors on their performance.

The qualitative interviews were gathered by the authors themselves, where the interviews lasted between 45 and 60 min and included open-ended questions. Participants in the qualitative interviews were selected in purposive sampling from the north, middle and south of the country. The interviews were conducted individually in-person. Five interviews were conducted via Zoom during lockdown periods due to COVID-19. Data were collected until theme saturation was achieved after the 18th interview. Five interviews were conducted via Zoom during lockdown periods due to COVID-19. The health professionals were asked about the challenges/obstacles they face in their everyday work, the causes of these obstacles and what are their recommendations/suggestions to improve the situation. The patients were asked to describe their experiences with the healthcare centres they visited and the healthcare providers, the challenges and difficulties they faced, and how they cope with the difficulties they face as a result of their health condition. The aim of interviewing health professionals was to contrast their responses and views with those of patients for a more valid understanding of the causes and consequences of low or

high patient satisfaction with their hospital experiences. Interviews were recorded and transcribed verbatim by experienced data collectors.

Transcripts were entered into a Dedoose, a computer program designed specifically for qualitative data analysis. Analysis was conducted by following the content analysis method. The transcripts were read line by line and each line was given a code in an open coding manner. The codes were then organised into major themes and subthemes. The research team members conducted analyses independently then met and discussed the themes to ensure greater validity.

### The instrument

The HCAHPS was developed by the AHRQ through extensive literature reviews, cognitive interviews, consumer focus groups and stakeholder input. The HCAHPS was designed to indirectly measure quality of hospital services in the USA. The CMMS uses the HCAHPS as one measure of hospital quality among others. According to the Centers for Medicare & Medicaid Services CMMS, 'hospitals that fail to publicly report the required quality measures, which include the HCAHPS survey, may receive a reduced annual payment update'.<sup>15</sup>

The HCAHPS contains core questions assessing six critical aspects of patients' hospital experiences (communication with nurses and doctors, the responsiveness of hospital staff, the cleanliness and quietness of the hospital environment, communication about medicines, discharge information).

The HCAHPS questionnaire consists of 19 core questions focusing on patient experiences with hospital care.<sup>16</sup> The first part of the questionnaire included sociodemographic variables gender, age, residence, marital status, education, specialty, job and insurance type. The second part of the questionnaire included questions on communication with doctors, communication with nurses, responsiveness of hospital staff, hospital environment, communication about medicines and discharge information. In this study, only 13 questions were selected to match with our context. The responses were on a 4-point Likert scale (1=always, 2=most of the time, 3=rarely and 4=never). We coded always and most of the time as (1), rarely and never were coded as (0). Therefore, the answers were dichotomised to 1 indicating that the quality condition was met and 0 indicating that it was not. We created a new variable by summing up the score of each of the dichotomised questions (0 or 1) to indicate a total score that ranged between 0 and 13 with 0 indicating the lowest possible overall quality experienced by our participants and 13 the highest possible score.

### Instrument validity and reliability

The HCAHPS validity and reliability were validated in numerous studies showing that better patient experiences as reported by HCAHPS to be associated with traditional objective measures of hospital quality including lower rates of decubitus ulcer, prevention of hospital-acquired

infections, better pneumonia care, and better drug compliance and safer care.<sup>12 17 18</sup> The usability of the questionnaire in different cultures was also confirmed by studies in the USA,<sup>13</sup> Malaysia<sup>14</sup> and Saudi Arabia.<sup>19</sup>

The face validity of the questionnaire (clarity and relevance) was confirmed through discussions among the research team and with clinicians and experts and in the pilot study. The global rating questions on whether the patient would recommend the hospital for others and their overall satisfactions were not included in our survey because the summation of the specific items should eliminate the need for an overall rating scale. As such, we decided to include only the specific items to avoid redundancy and to reduce the survey time. The Cronbach's alpha of the scale was 0.915 indicating excellent internal consistency.<sup>20</sup>

### Data analysis

The SPSS program V.26 was used in data analysis. Means and SDs of continuous numeric variables were computed and then recoded in appropriate categories. Descriptive statistical analysis was made by comparing frequencies and percentages of different variables. Bivariate analysis of independent variables with dependent variable (experiences with hospital care: good vs poor) was conducted. The coefficient values and 95% CIs were used to determine the association between independent variables and the dependent variable. P values of equal or less than 0.05 were considered as statistically significant.

The qualitative data were analysed thematically. First, the transcripts were read carefully, then, initial codes were generated independently by each researcher and the themes agreed on. Finally, the themes were combined with and related to the quantitative results.

## RESULTS

### Quantitative part

#### Background characteristics

The average age of the sample was 41.34, SD (16.4), range (18–87). Females represented 61.9% of sample, while males represented 38.1%. Palestine is divided into two separate regions, the West Bank and the Gaza Strip. Almost three-quarters (292/391) are from the West Bank and 25.0% from the Gaza Strip (99/391). The majority of respondents were city dwellers (51.5%), and 37.6% from towns and villages while 10.7% were residents of refugee camps. About 61.7% have completed studies after secondary school. One-quarter of participants (25.4%) reported a difficult financial situation while 19.5% can easily meet monthly family demands. Most participants, 62.9% have reported about their experience at a governmental hospital, while 31.7% reported their experiences at an NGO/private hospital, and only 5.4% reported their experiences at a hospital outside of Palestine (table 1). Those who were treated outside of Palestine are Palestinian citizens who were referred to a hospital outside of Palestine.

**Table 1** Background characteristics of participants (n=391)

Variable	n	%	Variable	n	%
<b>Gender</b>			<b>Educational level</b>		
Male	149	38.1	None	43	11.0
Female	242	61.9	Elementary/secondary	107	27.4
Region			Diploma	43	11.0
West Bank	292	74.7	Bachelor	161	41.2
Gaza	99	25.3	Master or above	37	9.5
Residence			Specialty		
City	202	51.5	Other	55	14.1
Village	97	24.8	None	148	37.9
Town	50	12.8	Biomedical	54	13.8
Camp	42	10.7	Social and arts	106	27.1
			Technology and engineering	28	7.2
Financial situation, ability to meet the family monthly demands			Please tell us about your experience in only one hospital		
Very difficult/difficult	103	26.4	In a government hospital with an overnight stay	246	62.9
Moderate	212	54.2	In NGO hospital with an overnight stay	124	31.7
Easy/very easy	76	19.5	In a hospital outside Palestine: Israel, Jordan, Egypt, etc.	21	5.4
In general, how do you rate your health, compared with those of your age?			Age		
Excellent/very good	226	31.2	18–29	216	55.8
Good	104	26.6	30–49	106	27.0
Bad/very bad	61	15.6	≥50	67	17.1

NGO, non-governmental organisation.

### Descriptive frequencies

Table 2 shows the frequencies of responses to the questions in the HCAHPS questionnaire. The majority of respondents reported that nurses were respectful (81.6%), listened to them (76.5%) and explained clearly to them always or most of the time (70.1). Similarly, most respondent (80.3%) reported that physicians were respectful, (77.2%) listened to them and (68.0%) explained clearly to them always or most of the time. Communication about medicines received lower ratings with only 52.0% of participants reporting that the doctors and nurses told them the purpose of the medicines and even a lower per cent 38.9% reported being told about the side effects of the prescribed medicines always or most of the time. The majority of respondents reported high responsiveness of nurses to their needs with 73.7% reported receiving nursing services in a timely manner all or most of the time. A higher per cent of participants reported cleanliness (73.4%) than quietness (66.2%) in the hospital.

The lowest rating was on discharge information with only 29.4% of respondents given written information about the symptoms they may have after discharge from the hospital.

### Bivariate analysis

Table 3 shows the total score on the HCAHPS scale by background variables. Females reported a significantly higher overall score than males (8.99 vs 8.5;  $p=0.015$ ). The West Bank had a non-significantly higher score than Gaza (8.74 vs 8.33;  $p=0.348$ ). Educational level was not related to HCAHPS scores ( $p=0.153$ ). On the other hand, the type of education was significantly related to HCAHPS scores with respondents with biomedical background reporting the highest overall HCAHPS score ( $p=0.045$ ).

The financial situation was strongly associated with HCAHPS score with those with better financial situation reporting higher HCAHPS scores than those with a poor financial situation ( $p=0.001$ ). Similarly, participants with better health conditions reported higher HCAHPS scores compared with those with worse health conditions;  $p=0.047$  (table 3).

Hospital type is strongly associated with HCAHPS scores. Participants who visited hospitals outside of Palestine reported the highest HCAHPS score (11.1), followed by NGO/private Palestinian hospitals (10.4), and the lowest scores by government hospitals (7.5);  $p<0.001$  (table 3).



**Table 2** Frequencies of responses to the HCAHPS questions in the sample (n=391)

	Question	Always/most of the time %
Communication with nurses	Q1: During your hospital stay, how nice and respectful were the nurses with you?	81.6
	Q2: During your hospital stay, how carefully the nurses listened to you?	76.5
	Q3: While staying at the hospital, how many times the nurses explained things to you in a way you can understand?	70.1
Communication with physicians	Q4: During your hospital stay, how nice and respectful were the doctors with you?	80.3
	Q5: During your hospital stay, how carefully the physicians listened to you?	77.2
	Q6: During your hospital stay, how often the physicians explained things to you in a way you understand?	68.0
Communication about medicines	Q7: Before giving you medication, did doctors and nurses tell you the purpose of the medicine?	52.2
	Q8: Before giving you medication did doctors and nurses tell you the side effects of the medicine?	38.9
Responsiveness of hospital staff	Q9: During your hospital stay, how often you received nursing services in a timely manner?	73.7
Discharge information	Q10: During your stay in the hospital, did you receive written information about the symptoms that you may have after your discharge from the hospital?	29.4
	Q11: During your stay in the hospital, was your pain well-controlled?	76.2
Hospital environment	Q12: During your stay in the hospital, were your toilets and room kept clean?	73.4
	Q13: During your stay in the hospital, was the surroundings of your room quiet at night?	66.2

HCAHPS, Hospital Consumer Assessment of Healthcare Providers and Systems.

Individuals who stayed in surgical wards did not differ in their evaluation of hospitals compared with those who stayed in other wards;  $p=0.745$ .

### Multivariate analysis

Table 4 shows the results from the linear regression of variables related to HCAHPS score. Females report significantly higher scores than males (coef: 0.87, CI 95%: 0.157 to 1.587). Residents in Gaza reported higher scores than in the West Bank (coef: 1.45, 95% CI: 0.484 to 2.408), which is the reverse of the results from the bivariate analysis in table 2. On investigation, we found that there were significantly higher numbers of NGO hospitals in Gaza than in the West Bank. Therefore, the apparent advantage of the West Bank over Gaza that appeared in the bivariate analyses disappeared and even was reversed when adjusting for hospital type in the multivariate analyses.

Similar to the bivariate analyses, education was not associated with HCAHPS scores but having a biomedical or medical background significantly increased the HCAHPS scores compared with other types of education (coef: 1.53, 95% CI: 0.240 to 2.822).

The increased HCAHPS scores that were associated with financial status and health status in the descriptive analyses remained significant in the adjusted analysis. Having good and moderate financial situation is associated with significantly higher HCAHPS scores than having bad financial situation. Similarly, participants who reported bad health status also reported significantly

lower HCAHPS scores compared with those who reported good or excellent health status.

Finally, the highest HCAHPS scores were given to hospitals outside of Palestine, followed by NGO hospitals in Palestine, and lowest in government hospitals in Palestine (table 4).

### Qualitative part

The major themes that emerged from the qualitative interviews included: overcrowding, weak organisational and management processes, and inadequate supply of goods, medicines and equipment.

### Understaffing

Physicians, nurses and patients said that crowding in the medical world, emergency rooms and clinics is a major obstacle for them to provide quality services that include spending sufficient time with the patients and caring for all of their needs. Instead, they focus on their most urgent needs. These problems result from severe understaffing of the hospitals with adequate numbers of physicians and nurses and higher work load.

'You cannot give quality when you are overwhelmed with quantity. When I have 15 patients on a ward to take care of on a night shift, I barely have time to distribute the medications, leaving little time to care for patients' other needs.' A nurse at a government hospital, West Bank.

**Table 3** Bivariate analysis of factors associated with HCAHPS overall score (n=391)

Variable	Mean	n	P value	Variable	Mean	n	P value
<b>Gender</b>				<b>Educational level</b>			
Male	8.05	149	0.015	None	7.84	43	0.153
Female	8.99	242		Elementary/secondary	8.25	107	
<b>Region</b>				<b>Financial situation, ability to meet the family monthly demands</b>			
West Bank	8.74	292	0.348	Diploma	8.69	43	
Gaza	8.33	99		Bachelor	8.84	161	
<b>Residence</b>				<b>In general, how do you rate your health, compared with those of your age?</b>			
City	8.75	202	0.057	Very difficult	6.91	46	0.001
Village	8.45	97		Difficult	7.91	57	
Town	9.52	50		Moderate	8.82	212	
Camp	7.45	42		Easy	9.72	64	
Specialty				Very easy	9.67	12	
Other	8.71	55	0.045	Please tell us about your experience in one hospital or clinic			
None	8.16	148		Excellent	9.45	122	0.047
Biomedical	9.98	54		Very good	8.51	104	
Social and arts	8.52	106		Good	7.98	104	
Technology and engineering	8.57	28		Bad	8.36	52	
				Very bad	8.22	9	
<b>Financial situation, ability to meet the family monthly demands</b>				<b>In a government hospital with an overnight stay</b>			
Very difficult	6.91	46	0.001	In NGO hospital with an overnight stay	10.40	124	0.000
Difficult	7.91	57		In a hospital outside Palestine: Israel, Jordan, Egypt, etc	11.14	21	
Moderate	8.82	212		Treatment			
Easy	9.72	64		Surgery	8.57	220	0.745
Very easy	9.67	12		Other (medicines, education, etc)	8.69	171	

HCAHPS, Hospital Consumer Assessment of Healthcare Providers and Systems; NGO, non-governmental organisation.

### Weak organisational and management processes,

Organising systems and processes are among the least expensive measures that can improve services in hospitals. However, it appears that there are problems in simple managerial and organisational processes such as scheduling for appointments, organising lines, setting priorities and time management.

'We need a good manager to see what's going on in each department, teach, lead and to improve their using for the equipment.' Head Nurse, West Bank

'We were in a queue for three hours, we (the patients) started organizing the queue of people.' Female Covid-19 patient, West Bank

A male surgeon at a government hospital said 'We need 20 more physicians in this hospital due to the tremendous work pressure. We also need more nurses. There should be one

or two nurses for each patient in the ICU, whereas, here we usually have 2 to 3 nurses for the whole ICU'.

'The staff in the health center; I saw their facial expressions; I can tell they had not a minute of rest. They are very tired and frustrated with the unbearable situation.' Female Covid-19 patient, West Bank.

'I do not blame the doctors because the number of patients is huge and there are few doctors. The doctor barely has time to listen to you and write the prescription.' A female cancer patient, Gaza.

A male surgeon at a government hospital said 'Some governmental hospitals are more organized than others. Also some patients with mild health issues come to the hospital when they can be easily treated and at an outpatient clinic. Those patients take away precious time from patients with more severe conditions that need hospital care.'

**Table 4** Multivariate linear regression of predictors of higher HCAHPS scores

Hospital quality	Coef.	SE	T	P value	(95% CI)	
Sex						
Male	Ref					
Female	0.87	0.36	2.4	<b>0.017*</b>	0.157	1.587
Region						
West Bank	Ref					
Gaza	1.45	0.49	2.96	<b>0.003*</b>	0.484	2.408
Residence						
City	Ref					
Village	0.18	0.46	0.39	0.695	-0.718	1.076
Town	0.84	0.57	1.47	0.143	-0.285	1.963
Camp	-0.67	0.62	-1.08	0.279	-1.882	0.545
Work type						
Others	Ref					
None	-0.19	1.27	-0.15	0.882	-2.679	2.304
Biomedical	1.53	0.66	2.33	<b>0.020*</b>	0.240	2.822
Social and arts	-0.23	0.58	-0.4	0.688	-1.364	0.901
Technology and engineering	0.08	0.80	0.1	0.921	-1.499	1.659
Financial situation						
Difficult or very difficult	Ref					
Moderate	1.11	0.43	2.56	<b>0.011*</b>	0.256	1.957
Easy or very easy	1.51	0.55	2.77	<b>0.006*</b>	0.437	2.582
Health status						
Excellent or very excellent	Ref					
Good	-1.58	0.45	-3.55	<b>0.000*</b>	-2.458	-0.706
Bad or very bad	-0.99	0.55	-1.8	0.073	-2.082	0.093
Education						
None	Ref					
Primary/secondary	0.18	0.64	0.28	0.778	-1.070	1.429
Diploma	-0.44	1.40	-0.32	0.752	-3.204	2.315
Bachelor	-0.81	1.37	-0.59	0.556	-3.497	1.883
Master or above	-0.26	1.48	-0.17	0.863	-3.170	2.660
Hospital type						
In a government hospital with overnight stay	Ref					
Non-government hospital with an overnight stay	3.24	0.41	7.93	<b>0.000*</b>	2.437	4.044
Hospital outside Palestine: Israel, Jordan, ...	3.37	0.79	4.25	<b>0.000*</b>	1.812	4.934
Age						
18–39	Ref					
40–59	0.42	0.44	0.96	0.335	-0.441	1.290
≥60	1.09	0.58	1.87	0.062	-0.056	2.227

\*Bold figures indicate statistically significant values.  
HCAHPS, Hospital Consumer Assessment of Healthcare Providers and Systems.

The same physician added ‘the important point is the lack of incentives and motivations. For example, the hard working, highly skilled surgeon who performs complicated operations will not be rewarded, encouraged, or appreciated by the administration. As a result, distinguished and qualified physicians will become discouraged and lose interest over time.’

### Inadequate supply of goods, medicines and equipment

Physicians, nurses and patients reported shortages in critically needed medicines, gauzes, disinfectants and equipment in the hospitals. Sometimes patients had to purchase medicines from outside of the hospitals. There are also inequities in distributing equipment among government hospitals.



'There was neither drink, food, only a bed for sleep. The room was hot and there was no air conditioning. Also, it was narrow with three beds.' A male patient, Gaza

The qualitative themes support and explain the results from the quantitative analysis that show lower patient satisfaction with government hospitals compared with private hospitals. The reasons as expressed by patients and healthcare professionals are due to understaffing of government hospitals leading to inability of healthcare providers to attend to all patients' needs. The lack of organisational and administrative skills are other factors that negatively influence patients' experiences at government hospitals and underscore the need to train staff and advance their managerial and organisational skills.

## DISCUSSION

This study aimed at identifying the factors associated with Palestinian patients' experiences at hospitals within and outside of Palestine such as patient–nurse communication, patient–doctor communication, cleanliness and quietness of hospital facilities, communication about medicines, and responsiveness of nurses to patients' needs. The overall hospital experiences of Palestinian patients were moderate but varied significantly based on patients' factors such as sex, health status, financial status and place of residence as well as by hospital type. Our results show that participants who were females, healthy, with high financial status, from Gaza and who visited hospitals outside of Palestine reported higher scores on the HCAHPS scale.

We found that females reported higher HCAHPS scores than males. In the literature, several studies reported lower satisfaction among females with their care or have less positive experience with hospital care.<sup>21–23</sup> Inpatient care could be within females' expectation unlike other studies. Females' behaviour in hospitals differs compared with males. Safran *et al* showed that male and female patients behaved differently to a same symptom and accordingly physician do behave differently.<sup>24</sup>

In qualitative interviews, nurses said that females usually remain in their beds while men tend to leave their beds and go outside of the hospital to smoke or talk with friends. This may negatively affect their communication and the time they spend with hospital staff.

Healthier patients perceived better quality than ill patients. Many studies demonstrated similar findings.<sup>25 26</sup> Indeed, this can be explained by the fact that sick persons are more-likely to use hospital services and are more aware of medical services needed for their care. Therefore, sick people are more likely to encounter situations that would lead to their dissatisfaction. According to the theory 'physician mediation hypothesis', physicians might act differently with sicker patients in a way that could lead to lower level of rating quality or satisfaction.<sup>27</sup> Failure to treat ill patients may contribute to increase patients' tension and irritability towards medical care services and medical staff.

It is more difficult to treat sick patients with complex conditions that require long hospitalisation and qualified healthcare workers. It is easier to care for healthier patients with less complicated medical conditions. Patients do appreciate the way nurses and doctors behave, the amount of care given and politeness they show as well as information given regarding medication and health status.

We found that people with better financial situation report better hospital experiences. Individuals with high income could easily use hospital healthcare services in public hospitals with low waiting time. Moreover, they usually seek private hospitals which are characterised by respectful, clean and calm environment. Archibong *et al* showed that the level of income and occupational status of individual can influence healthcare service utilisation among people.<sup>28</sup> A study explained the theory of culture and income in utilisation of health services.<sup>29</sup> This is guided by belief system of people, in which cultural viewpoint, among high income people, with regard to utilisation of health services is determined by absence or presence of a disease and a need to seek healthcare. However, when the need to hospital care is decided, they easily have access and use either public or private hospitals.

Medical/health background is a predictor to quality of hospital care. A recently published paper found significant predictor of occupation to healthcare services in hospitals.<sup>30</sup> Those subgroups are familiar to their colleagues working in hospitals thus health professionals, especially nurses and physicians; treat them carefully with respect, dignity and showing extreme attention and care. It is also possible that people with biomedical backgrounds communicate better with physicians and nurses because they understand the medical terms and vernacular more than people without this background.

Patients from Gaza strip expressed better experiences compared with West Bank residents. Palestinians in both regions are suffering poverty and unemployment (16% in West Bank and 47%, in Gaza Strip) (Palestinian Central Bureau of Statistics).<sup>31</sup> However, the economic situation in West Bank is somewhat better than in Gaza strip. Thus, Palestinians from the West Bank have greater access to quality hospitals outside of Palestine. This access by patients from West Bank could have raised their expectations regarding hospital and healthcare services compared with patients from Gaza. As a result, Palestinians from the West Bank would give lower rating. In spite of these explanations, it is also possible that some aspects measured by HCAHPS such as communication with health providers, responsiveness of medical staff and communications about medicines are actually better in Gaza MOH hospitals compared with West Bank. This issue requires further investigation.

The hospital type was found to be also a predictor to patients' experience towards hospital quality of care. Patients' experiences were more positive towards hospitals of NGOs and outside In the West Bank, Sultan and



Crispim claimed that public hospitals improved their reform efficiency from 75% to 80%, however, still quality of hospital care is under question.<sup>32</sup> The quality of working life at governmental hospital is moderate as stated by 66% resident doctors in which the highest was reported in Palestine medical complex and the lowest was in Hebron hospital.<sup>33</sup> In the case of Gaza strip, substantial improvement is seen but comprehensiveness of care remained a major concern, availability of essential medicine and shortage of healthcare workers.<sup>34 35</sup> Our findings concur with Al-Sharif who revealed higher patient satisfaction in NGO hospitals than public hospitals in Palestine. On the other hand, Jordanian hospitals are private for-profit and are more focusing on hospitality, meeting patients' needs and expectations, consultancy and communication with patients.<sup>25</sup> In this regard, Palestinian public hospitals should turn their strategies to be client-centred.

In qualitative interviews, patients and health professionals reported that the large numbers of patients that a nurse and a doctor have to attend to prevents them from giving each patient appropriate time, health education and attending to all their needs. Although understaffing and lack of financial resources were reasons given for overcrowding at government hospitals, other reasons had to do due to mismanagement of processes, lack of organisational skills and lack of priority setting skills. Some processes such as organising lines, scheduling appointments and triaging cases can greatly improve healthcare services.

## LIMITATIONS

This study has some limitations. First, the nature of cross-sectional design limits causal inferences. Second, the study employed convenience sampling which limits generalisation of findings. Third, this is a self-reporting questionnaire. Fourth, it asked people to report on their experiences over the past 12 months making recall bias a possibility.

## CONCLUSIONS

This study has provided a snapshot to quality of communication with nurses and physicians and initial assessment of few structural aspects in hospitals as perceived by Palestinian patients. The results of the study emphasised the importance of patients' experiences as a crucial indicator for quality of care. Our study has found that being female, being healthy, having a medical background, treatment in non-public hospitals; better economic situation and living in Gaza strip were associated with better patients' experiences at Palestinian hospitals. Further researches are required to examine and determine hospital care variations among public hospitals.

## RECOMMENDATIONS

Based on these results, we recommend that all hospitals in Palestine (governmental and non-governmental) adopt

principles of patient-centred care in their strategies. Hospitals should also pay more attention to informing patients about the purposes and side effects of the medications they are prescribed and to informing patients about symptoms, complications and self-care after discharge.

Health professionals should consider the educational background of the patients and communicate with them accordingly in ways they can understand. It is important to note that the type of education is a better predictor of higher HCAHPS scores than the degree of education.

Hospital managers should conduct periodic community and clinic exit surveys that assess patient expectations and satisfaction. They also should emphasise and follow-up communication standards between healthcare providers and patients. Nursing and medical educators need to give more emphasis to communication with patients, organisational, managerial and prioritisation aspects of care during clinical training of staff and students.

The Palestinian MOH is the largest provider of healthcare in Palestine and its services are the only option for poor Palestinian citizens. The Palestinian MOH should design a system of incentives to motivate staff to develop and excel in their performance. The overcrowding problem at government hospitals should be alleviated by instituting a triage system to filter out mild cases that can be treated at outpatient clinics and by improving the scheduling and appointment setting system as well as increasing staffing.

Further research is needed by including healthcare providers and by using other measures of quality in Palestinian hospitals.

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