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### RESEARCH ARTICLE

#### THE SATISFACTION OF PATIENTS ON SURGICAL CLINICS DURING THE COVID-19 PANDEMIC

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#### Abstract

Coronavirus disease 2019 (COVID-19) has spread globally to more than 62 million persons with overwhelming impact to the healthcare systems and chronic ill patients worldwide. In this study, our aim was to assess the satisfaction of surgical patients regarding their routine clinic visits during the COVID-19 pandemic in the Kingdom of Saudi Arabia. We conducted a descriptive cross-sectional study using a structured interview with questionnaire in the Kingdom of Saudi Arabia with a sample size of 518. Descriptive analysis was performed by using IBM SPSS version 17 (Chicago: SPSS Inc.). The results showed that most of the participants did not visit their scheduled surgical clinics during the COVID-19 pandemic and most of the ones who visited were very dissatisfied with the services they received. Accordingly, approaches to implement precautionary measures against COVID-19 and long-distance communication such as telemedicine, when properly instituted, can have a wider impact during this pandemic and in the future ones.

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#### Introduction:-

Coronavirus disease 2019 (COVID-19), a respiratory disease caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) was first reported in Wuhan China, December, 2019, and has now spread globally to more than 62 million persons. The virus is transmitted from one person to another, mainly through the mouth, nose, or eyes via respiratory droplets, aerosols, or fomites [1]. In Saudi Arabia, less than three hundred and sixty thousand cases have been recorded with 98% recovery rate. The total number of deaths is less than sixty thousand. The minimal cases and deaths in Saudi Arabia compared to neighboring countries are due to Saudi Arabia's bold

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response to COVID-19 from the beginning of the pandemic. Before a single case of COVID-19 was reported in Saudi Arabia, Muslims from other countries were prohibited from attending pilgrimage in the holy city of Mecca. As of March 14, 2020, Saudi Arabia prohibited all international flights before recording any COVID-19 death in the country and all Saudi citizens returning from abroad before the suspension of international flights were quarantined in designated facilities or required to self-isolate at home. Three days later, Saudi Arabia moved quickly to implement its own version of a lockdown where the attendance of employees at all government workplaces except health, security and education workers, was suspended for 16 days. Before the lockdown, Saudi Arabia also ordered the closure of non-essential services such as services in markets, shopping malls, beauty salons. Also all unnecessary gatherings in public places, including parks, beaches, resorts, camps and wild parks were prohibited. Other public health measures to prevent the spread of COVID-19 such as hand washing and wearing face masks as directed by the World Health Organization were implemented successfully. In May 26, Saudi Arabia cautiously started to ease public health restrictions and currently in its third phase before returning to normal, essential public health measures against the spread of COVID-19 are still in place. Despite these successes to curb the spread of COVID-19 in Saudi Arabia, COVID-19 has impacted healthcare systems around the world and patients suffering from other diseases in various ways. Elective procedures have been rescheduled and delayed in many hospitals in order to prevent the spread of COVID-19. Decline in hospital admissions of non-COVID-19 patients has also been reported [2]. Other researchers have documented a marked decline in vaccinations, primary prevention services and overall disruption in healthcare provision [3][4]. Patients with heart disease, strokes, and other acute diseases have been detrimentally affected because of the fear of contracting COVID-19 when attending for medical care during the pandemic [5]. COVID-19 pandemic has therefore impacted many patients, particular chronic ill patients who need to attend clinic regularly, and healthcare systems globally have responded differently. In this study, our aim was to assess the satisfaction of surgical patients regarding their routine clinic visits during the COVID-19 pandemic in the Kingdom of Saudi Arabia.

## **Materials And Methods:-**

### **Study design**

We conducted a descriptive cross-sectional study in the Kingdom of Saudi Arabia to determine patients' satisfaction with healthcare services provided in surgical clinics during the plight of COVID-19 pandemic. Our methods and findings are reported according to the STROCCS criteria.

### **Study population and sample**

We included patients who were attending outpatient clinic in the department of surgery at King Abdul-Aziz University Hospital in Saudi Arabia. A non-probability convenient sampling technique was employed and a total of 518 patients were interviewed.

### **Study procedures**

We developed a questionnaire to collect data on patients' satisfaction with healthcare services provided in surgical clinics during the plight of the COVID-19 pandemic in Saudi Arabia. The relevance of our questionnaire was assessed through the Delphi methodology. The questionnaire was pilot-tested in a random sample of 10 patients attending surgical clinic outside of King Abdul-Aziz University Hospital. The final questionnaire consisted of two parts; socio-demographic characteristics of patients and relevant questions regarding patients' satisfaction during surgical clinic attendance in the plight of COVID-19 pandemic. Participants were asked to score their satisfaction with a 5-point Likert scale ranging from 1 as very dissatisfied to 5 as very satisfied. Data collection took place between 5<sup>th</sup> August 2020 and 22<sup>nd</sup> November 2020.

### **Statistical analysis**

Data analysis was performed by using IBM SPSS software version 17.0 (Chicago: SPSS Inc.). For descriptive analysis, variables were presented in frequencies and percentage.

### **Ethical Considerations**

Ethical approval was granted by King Abdul-Aziz University, Saudi Arabia. A written informed consent was obtained from every participant before recruitment. Privacy and confidentiality were maintained.

## **Results:-**

### **Socio-demographic characteristics**

Of all, 62.9% participants were females. Only 35% of all participants were non-Saudi. The mean age of participants was 29 years. (See Table 01 below)

**Table 01:-** Socio-demographic characteristics of participants.

Socio-demographic variable		Frequency	Percentage (%)
Sex	Male	192	37.1
	Female	326	62.9
Age	18 – 24	169	32.6
	25 – 34	154	29.7
	35 – 44	85	16.4
	45 – 54	110	21.2
Nationality	Saudi	483	93.2
	Non-Saudi	35	6.8
Did you visit a surgical clinic during COVID-19 pandemic?	Yes	121	23.4
	No	397	76.6
Type of clinic visited	Government hospital	64	12.4
	Private hospital	47	9.1
	Medical clinic	7	1.4
	Health center	3	6
Gender of the attending physician	Male	79	15.3
	Female	42	8.1
Visiting time	A.M	90	
	P.M	31	

**Table 02:-** Participants responses (In %) regarding their satisfaction with services.

Variables and response	Very dissatisfied	Dissatisfied	Neutral	Satisfied	Very satisfied
Booking dates were suitable for me	13	8	22	33	45
COVID-19 preventive measures were implemented	11	5	28	38	39
Enough time with the doctor	12	9	22	33	45
Comfortably explained their illness	11	8	24	33	45
Doctor's attitude	21	22	35	26	17
Clinical examination	33	22	25	13	28
The doctor was busy with phone	43	14	29	13	22
Diagnosis explained well to the patient	34	20	30	16	21
Understanding the patient's condition	30	25	32	12	22
Explanation on how to use medications	39	20	22	17	23
Understandable patient-doctor communication	9	4	31	28	49
Necessary investigations done	12	9	25	24	51
Appointment re-scheduled	17	4	26	29	45

### Discussion:-

We analyzed the results of 518 participants who responded at 100% rate. Most of the participants, about 62.9% were females. The mean age of the participants was 29 years and 93.2% of all participants were Saudi. Only 23.4% (n=121) of all participants visited their clinics during the COVID-19 pandemic before the day of the study. During the COVID-19 pandemic, face-to-face outpatient appointments were advised only when necessary[6]. This is because it increases the risk of infection for both the patient as well as the doctor. Some studies have found that health worker infection prevention and control compliance, particularly for hand hygiene and disinfection, was inadequate in outpatient clinics[7]. This may account for our finding that most participants did not attend to their scheduled surgical clinics during the COVID-19 at the time of our study. Of all, most of the participants, about 12%, went to government hospitals clinics and about 9% went to private hospital clinics. This finding was not

contradictory as most healthcare services in Saudi Arabia are offered through government health facilities[8]. Primary healthcare facilities have been overwhelmed by the pandemic may have contributed to the transmission of COVID-19 because of weak infrastructures to ensure patient safety[9]. Only 37% of participants who visited their surgical clinics were very satisfied with their booking dates to clinic. In some parts of the world, some of the outpatient routines such as booking have been shifted online. Some researchers have suggested that this should be the new norm to prevent the spread of COVID-19[10]. Our finding therefore comply with the suggestion that online bookings during the COVID-19 pandemic can be widely adopted to increase the turnout of patients, prevent the spread of COVID-19 and increase satisfaction of patients. Only 9.1% of participants who visited their surgical clinics were very dissatisfied with the precautionary measures taken to prevent the spread of COVID-19. This finding was similar to findings from one study that revealed inadequate precautionary measure in outpatient settings that may lead to patient dissatisfaction[7]. Of all, 37.2% of participants who visited their surgical clinics reported that they were very satisfied with their time taken in the consultation room with the doctor. During the COVID-19 pandemic, doctors may have decided to reduce the time taken during consultations. This may have in one way reduced the spread of COVID-19 and compromise patient care in another way. Some healthcare systems have adapted video consultation as an alternative to prevent the risks of COVID19 and still deliver consultation services to patients[11]. The usefulness of video consultation can be more researched and improved to successfully implement telemedicine that can have wider impacts for health services in acute settings and remote areas. Although telemedicine can improve the healthcare system in various ways, some researchers have pointed out key challenges related to documentation, communication and development of governing guidelines[12]. COVID-19 has also affected the doctor-patient relationship such that some patients were not comfortably capable to have adequate comfort during consultation. Appropriate doctor-patient relationship can improve patient's health and medical care[13]. In our study, only 37.2% of participants comfortably explained their illness to the consulting doctors and were very satisfied. Of all, 17.4% of participants were nervous and ashamed of the attitude of the doctor and were very dissatisfied. In this group, the fear of COVID-19 may have inflicted attitudinal changes and provoked a sense of self protectionism that can lead to poor rapport between the consulting doctor and the patient. Doctors, who are in the high risk group, may also have developed the fear of contracting COVID-19 and hence avoided some of the necessary practices of medical care. In our study, of all participants who visited their surgical clinics, 27.3% did not receive proper medical examination during their consultations and were very dissatisfied. This was likely a result of fear and anxiety for COVID-19 that has been documented extensively in literature[14]. Of all, 35.5% of participants who visited their surgical clinics, the consulting doctors were busy with their mobile phone and the patients were very dissatisfied. The fear of COVID1-19 may have resulted to less concentration to patients among doctors and burnout among healthcare workers[15]. Of all, 28.1% of participants who visited their surgical clinics reported that their consulting doctor did not explain their diagnosis to them and they were very dissatisfied. Studies show that when patients do not understand their illness well, they are less likely to follow up the treatment and take preventive measures[16]. Considering the social anxiety associated with COVID-19, this may have resulted to poor patient outcomes. Of all, 24.8 of participants who visited their surgical clinics felt that the doctor did not understand their condition and they were very dissatisfied. Although we did not consider cultural barriers in communication and other factors that can affect mutual understanding between the patient and the doctor[17], it is likely that our finding was due to lack of enough attention to patients in the plight of COVID-19 pandemic. Of all, 32.2% of participants who visited their surgical clinics were very dissatisfied when the doctor did not explain to them how to use their medications. Although some patients frequently do not take medication as prescribed and tend not to disclose their medication-taking behavior[18], the lack of proper communication regarding the use of medication may have compounded this effect. Only 7.4% of all participants who visited their surgical clinics were concerned that they did not have any understandable communication with the doctor and they were very dissatisfied. As patient-doctor communication is essential for proper treatment, this small group of patient may have missed some important healthcare services. Of all, 9.9% of participants who visited their surgical clinics were concerned that the consulting doctor did not undertake all necessary investigation for their condition and they were very dissatisfied. Some studies have found that during the COVID19 pandemic, the surge of COVID-19 investigations in the laboratory lead to overall decrease in testing volumes[19]. Of all, 14% of participants who attended their clinics were very dissatisfied with re-scheduling of their visits. Although patients were dissatisfied, re-scheduling of non-urgent care has the potential of reducing contacts and prevent the spread of COVID-19 hence, patients should be educated to understand the essence of these practices. This study was limited by a small sample size that cannot represent the whole population of Saudi Arabia.

**Conclusion:-**

In our study, most of the participants did not visit their scheduled surgical clinics during the COVID-19 pandemic. This may have lead detrimental health consequences. Most of the participants who visited their surgical clinics were

not satisfied in many ways including how the precautionary measures instituted to prevent the spread of COVID-19 were implemented. This suggests that these measures were not well implemented in outpatient settings. The fear associated with COVID-19 also affected the doctor-patient relationship in various ways and compromised healthcare provision to many patients. Our results therefore suggest that most patients were not satisfied with their visits in outpatient surgical clinics and therefore approaches to implement precautionary measures against COVID-19 and long-distance communication such as telemedicine, when properly instituted, can have a wider impact during this pandemic and in the future ones.

### Conflict Of Interest

No conflict of interest was declared from any author

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