

“The Association between Waiting Time and Patient Satisfaction in Outpatient Clinics” at “King Abdullah Medical City, Makkah”

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Abstract

BACKGROUND: Patients have historically found lengthy wait times to be annoying, and this appears to be a consistent and important contributing factor in their unhappiness. The timely, effective, and patient-centered delivery of high-quality healthcare is influenced by patient happiness, and patient satisfaction is linked to clinical outcomes, making it a key indicator for determining the quality of healthcare. Waiting time, which is a crucial component in determining service quality, could be a useful instrument for assessing patient satisfaction. It has been proven that waiting times and patient satisfaction have a significant inverse relationship.

“OBJECTIVE”: The goal of this examination is to recognize the association among to come time and patient pleasure and to identify predictor’s patient satisfaction and waiting time in outpatient clinics in a KAMC, Makkah

SETTINGS/DESIGN: The project type is a descriptive-analytical research design. Undertaken at “King Abdullah Medical City, Makkah”.

“SUBJECTS AND METHODS”: A sample of 499 patients was recruited. The investigator collected the socio demographic data from patients’ electronic /files, the other data included patient waiting time, and patient satisfaction score, which was collected from the hospital quality department and patient experience department during the period of 2021.

RESULTS: The result shows that the remaining patients weren't happy, but nearly half of them were. Participants' satisfaction scores varied significantly according on their gender, age group, and type of visit. There is no statistical differences between satisfaction score with nationality and place of resident. The result also shows that by waiting time, the satisfaction rating varied dramatically. In addition, most of the participants who waited more than 20 minutes shows that they were dissatisfied. The test result also demonstrates that waiting time and satisfaction are related except consultation time it shows that no statistical relationship. Finally the result identified that age, gender and type of visit as significant predictors of patient satisfaction.

CONCLUSION: The necessity of assessment should be the emphasis of healthcare organizations the patient's satisfaction in relation with waiting time in outpatient department since doing so will give a rudimentary comprehension of the patient's viewpoints on improving their satisfaction. This outcome can aid healthcare organizations in determining where they need to improve. In order to reduce outpatient waiting times, improve patient happiness, and determine the efficacy of interventions in healthcare settings, additional experimental research is necessary.

Keywords: *Outpatient Clinics, Patient Satisfaction.*

INTRODUCTION

1. Preface

This chapter presents the background of the research then describing the goals and objectives of the research, then discussing the study's importance. Research hypotheses, dependent and independent variables, research variables, research methods, and data collecting come next. The research structure was lastly mentioned, and a chapter summary concludes this one.

2. "Background"

Patient satisfaction may be measured by waiting time, a factor considered to be important for determining quality of care. There has not been any study conducted in Makkah, Saudi Arabia. Thus, it may be the beginning of the upgrading overall eminence outcomes of wellbeing repair in outpatient department. Patient satisfaction refers to the range tolerant is satisfied fitness care provided by the earner. Clinical outcomes, retention, and malpractice claims can all be impacted by patients' satisfaction with their healthcare. As a result, it is a reliable sign of the caliber of the job being done in the outpatient department. Therefore, the goal of this research is to fill up the information gap between patient satisfaction and waiting times.

Patient waiting times for healthcare services are considered a key indicator of an effective health system by the World Health Organization (WHO). Patients' waiting times refer to the length of time they must wait to consult with and be treated at healthcare facilities. (Robone et al., 2011). Six guiding

principles are outlined in the "Institute of Medicine of the United States" (US) report "Crossing the Quality Chasm" for retaining competitiveness in healthcare delivery. One of these tenets is to provide prompt care and end harmful delays. All patients must be seen within 30 minutes of their planned appointment times under the UK's Patient's Charter. (2017) Sun et al. In a well-designed healthcare service management system, for appointments or consultations, people shouldn't have to wait around for very long.

A major waiting stint problem in the health-care structure is long lines at registration and admission windows. As a result, hospitals were congested at times since patients were not able to make appointments, but rather registered at the service window when they arrived. The first step in ensuring that patients have timely access to healthcare services is making an appointment. To replace the conventional practice of patients physically making appointments within hospitals, numerous appointment-scheduling technologies (including web-, landline-, mobile-, and ATM-based approaches) have been created. (Cao et al., 2011, Zheng XJ, Ji XM., 2009).

Patients feel satisfied with their doctor's care when they are satisfied with their treatment (Farley et al., 2014). The satisfaction of patients with health-care services could have an impact on clinical outcomes and medical malpractice lawsuits (Prakash B. 2010). Therefore, it is a key indicator of how well hospitals perform their jobs. Several core goals for health care were outlined by the "Institute of Medicine" (IOM) in a report: (a) secure, (b) effective, (c) patient-centered, (d) fair, (e)

prompt, and (f) successful. Of these aims, timeliness has received the least attention and understanding. Committee on Quality of Health Care in America of the Institute of Medicine (US), 2001.

Waiting time and patient satisfaction are negatively correlated. At least 90% of patients should receive care within 30 minutes of their planned appointment time, according to the Institute of Medicine (IOM). (Ms and others, 1983). Because it affects the patient's propensity to visit the clinic again, waiting time has a negative effect on the patient's usage of health services and compromises treatment continuity. Therefore, shorter wait times can result in greater patient satisfaction and a stronger willingness to keep getting treatment from the same facility. (Camacho and others, 2006). Long wait times have been linked to low patient satisfaction in a number of studies. (Anderson, 2007).

A 2019 Saudi Arabian study found that the only variable with a significant impact on overall happiness was waiting time, with those who waited for more than 30 minutes reporting lower satisfaction expressing displeasure with the service provided. (Alrasheedi et al., 2019). According to a King Abdul-Aziz University survey, 65.3 percent of patients indicated the extended their pleasure was negatively impacted by the wait duration. (Al-Harajin et al., 2019). Thus, this study is being conducted to determine whether waiting times and patient satisfaction in a specialty hospital are related, Makkah

3. Research Aims and Objectives

The study's goal will be to look into the relationship in outpatient clinics between waiting time and patient satisfaction in a King Abdullah Medical City, Makkah. The following objectives help to achieve this goal:

- a) to find out how long it takes to wait to see a consultant at the clinic.
- b) to determine the factors that influence patient satisfaction and wait time.
- c) to evaluate the link between certain variables and patient satisfaction.

4. Significance of the Research

Patient satisfaction is a crucial indicator of the quality of healthcare given that it affects the prompt, effective, and patient-centered delivery of high-quality care and is associated with clinical outcomes. Long wait times for patients have been a cause of aggravation for patients, who appear to be dissatisfied with the situation on a regular basis. Numerous studies have discovered a strong inverse relationship between waiting time and patient satisfaction. (Michael and others, 2013)

The requirement to offer overall affected person happiness is developing increasingly more crucial as healthcare answers end up more personalized and consumer-driven. Long wait times have long been seemed as a supply of frustration for patients, and subsequently appear to be a non-stop and primary supply of dissatisfaction. Many studies have determined a full-size inverse link among affected person satisfaction and waiting time. The requirement to offer general patient happiness is growing increasingly more essential as healthcare solutions turn out to be greater customized and consumer-pushed.

Waiting time, which is a crucial component in determining service quality, could be a useful instrument for assessing patient satisfaction. There has not been any research into this topic in Saudi Arabia's Eastern region. As a result, this research could serve as a springboard for bettering the overall standard of medical treatments and results. At KAMC, the purpose of the study was to examine the connection between waiting time and patient satisfaction. As well as assess factors that affect patient satisfaction and waiting time, in order to inform impending exploration and excellence upgrading plans.

5. Variables in Research

Each variable has a clear description and a logical connection to the study's goal (s)

5.1. Dependent variable

- Out patient satisfaction score

5.2. Independent variables

- Patient Waiting time
 - Gender
 - Age
 - Clinic type
 - Visit type
6. “Research Hypothesis”
- Waiting time and the outpatient satisfaction score are significantly correlated.
 - The patient's gender and the patient's overall satisfaction score differ significantly.
 - The patient's age and the outpatient satisfaction score are significantly correlated.
 - The level of outpatient satisfaction is significantly correlated with the type of clinic.
 - There is a strong correlation between the outpatient satisfaction score and the type of visit.
7. “Research Methodology and Data Collection”

This study used a quantitative technique as its methodology. Descriptive-analytical research design is the study kind. All patients who visited the KAMC outpatient department in Makkah, Saudi Arabia, were included in the study's population.

The complete amount of data was collected over the course of one month, with an estimated 16000 patients. An estimated 800 patients visited the outpatient section each day. Assuming a minimum response rate of 50% and a confidence range of +/-5%, the minimal sample size by the total number of patients is 376. The selection of the section was by using simple random sampling method. Total number of sample was 499. Patients attending family medicine or specialty clinics throughout the study period and who were 18 years of age or older, able to understand Arabic or English, and interested in participating in the study were eligible for inclusion in the study.

The survey instrument was created with data collecting in mind and was based on initial

interviews with organization specialists that helped to obtain a thorough grasp of the situation and the factors involved. Patient satisfaction score was obtained from the patient experience administration, which had the greatest number of factors that may be used to determine the connection between wait time and patient satisfaction. Reference was made to a few standardized questionnaires (<https://www.pressganey.com/>), and based on the demands of the current situation, unique survey questions were devised, which comprised the majority of elements sufficient to determine the relationship between waiting time and patient satisfaction. The survey questions consist made up of two parts. The data contain Sex, Oldness, Nationality, Place of resident and type of visit. The investigator collected the socio demographic data from patients' electronic/files onto data collection forms not showing any nominative information. Other data included patient waiting time and patient satisfactory score, which was collected from the hospital quality department and patient experience department data during the period of 2021. The information-included on waiting time is waiting time from appointment to Physician encounter > 20 minutes.

Statistical Package for the Social Sciences (SPSS), version 21, will be used to evaluate the acquired data after being entered into Microsoft Excel, version 16.13.1 (IBM, Armonk, NY, USA). Prior to entry and before analysis, all variables were coded. Means and standard deviations were determined as part of descriptive statistics. A nonparametric technique called the chi-squared test was used to examine the differences between satisfied and dissatisfied patients. A multiple univariate logistic regression model was created to determine the predictors of patient satisfaction, and the chi square test was utilized to examine the relationship between waiting time and satisfaction. The level of significance was set to a 95% confidence interval (CI), and p-values below 0.05 were regarded as significant.

8. “Structure of the Research”

There will be six chapters in the study:

“Chapter One: INTRODUCTION”

Provides background information on the discipline and introduces the study topic. This chapter discusses the context of the study and offers justification for the topic choice. The research terminology, goals, objectives, methods, and structure will also be introduced.

“Chapter 2: LITERATURE REVIEW”

Includes an analysis of prior research and pertinent literature. It analyses previous studies that looked into the relevant topic and covers all the study variables in addition to giving an overview of the contemporary situation.

“Chapter Three: RESEARCH METHODOLOGY”

Will talk about the research technique. This chapter will address concerns with research philosophy and provide a step-by-step explanation of the research process. It will provide an easy-to-understand visual depiction of the study plan and the data collection techniques employed. The sampling requirements and ethical issues will also be covered.

“Chapter Four: DATA ANALYSIS AND RESULTS”

Will include a presentation of the primary data that was gathered. The incorporation of bar charts, pie charts, and graphs along with the corresponding explanations will simplify the data presentation.

“Chapter Five: DISCUSSION”

Will include discussions and analyses of the core data gathered. The chapter will look at the success of the study's goals and objectives. Additionally, it will evaluate the new findings in light of earlier research and literature covered in Chapter 2.

“Chapter Six: SUMMARY, CONCLUSION AND RECOMMENDATIONS”

Will wrap up the research and provide a summary of how well the goals and objectives of the study were met. It will also mention the challenges that are being faced and how the

study might affect the healthcare sector. The chapter will also discuss the potential for additional research on the same topic.

9. “Chapter Summary”

Patient satisfaction impacts the timely, effective, and patient-centered delivery of quality healthcare, and it is linked to clinical outcomes, making it a crucial metric for evaluating the quality of healthcare. In a Saudi Arabian tertiary hospital, the aim of this descriptive-analytical study design is to investigate the relationship between waiting time and patient satisfaction. As such, this aims achieved through the following objectives such as to fix the waiting spell it incomes to see a consultant at the clinic and to identify the predictors of patient satisfaction and to come time and to assess the connection amid patient satisfaction and selected variables KAMC, Makkah, Saudi Arabia.

LITERATURE REVIEW

1. Preface:

This chapter provides a survey of the literature in four areas: patient satisfaction in outpatient clinics, long waits in outpatient clinics, the relationship between patient waiting and patient happiness in outpatient clinics, and study findings. The gap in the literature and a synopsis of the final chapter come next.

2. Literature review

To cut down on wait times and boost outpatient satisfaction, Sun et al. (2017) conducted a longitudinal study in a Chinese public tertiary general hospital. When the corresponding improvements were put into place, the monthly average wait time for consultations dropped by 3.49 minutes, and the monthly average wait time for prescription fillings dropped by 8.70 minutes. For filling prescriptions, the pattern moved from a little increase at the start to a considerable decrease later. There was a strong negative connection between outpatient satisfaction with pharmacy services and the time it took to fill prescriptions. They concluded those continual efforts, rather than a

one-time campaign, resulted in a long-term reduction in prescription filling wait times, and that proper incentives were adopted by a taskforce authorized by hospital leadership.

Alarcon-Ruiz et al. (2019) looked at the connection between patient satisfaction and waiting and consultation times. In this cross-sectional secondary data analysis, patient satisfaction, wait period, consultation time, and sociodemographic factors were all gathered. The findings demonstrate that waiting time (per 10 minutes) is inversely related to patient satisfaction, while consultation time (per 10 minutes) is directly related to patient happiness.

Michael et al. (2013) published a quality improvement project report on enhancing waiting lists and patient satisfaction in primary care (2013). After completing the initial PDSA cycle, they saw significant reductions in the mean waiting room and exam room wait times as well as a significant rise in patient satisfaction with waiting room longer waits. The results support the Dartmouth Microsystem Improvement Curriculum (DMIC) framework, indicating it is possible to improve primary care patient service time and satisfaction by using the PDSA methodology.

3. Previous studies

3.1. Previous studies related to the Outpatient clinic wait times

A cross-sectional descriptive study on the distribution of long waits and patient arrival times in the emergency outpatient department was conducted by Tiwari et al. (2014). The study's objective was to evaluate the patient arrival and lag time distribution in an emergency outpatient department in order to evaluate the patient flow system (EOPD). 591 patients provided the information. In addition to the emergency's daily census data (discharge rate, admittance rate, transfer out rate, etc.), long waits and gaps between patients' arrivals were calculated. The findings indicate that patient arrival times in the EOPD were highly stochastic, with the peak arrival periods being 9.00–12:00 h, when approximately 26.3 percent of patients came. The three most frequent waiting spaces were for patients who were

being observed (29.6%), waiting for conventional diagnostic testing (16.4%), and waiting to be released (14.6 percent). The emergency complex's problems caused about 71 percent of patients to wait.

In 2016, Almomani and AlSarheed published an essay on how to improve outpatient clinic management software by minimizing patient wait times. The Outpatient Management Software (OMS) was studied in this research, and strategies to lower waiting times were proposed. The tips in this article reduce wait times by enhancing the software that manages outpatient clinic services. Long or unmeasured waiting lists may be caused by any of five significant problems: Appointment kind, ticket numbering, doctor's tardy arrival, patient's early arrival, and patient distribution list. The data demonstrate that patient waiting times have decreased. When late doctor arrival difficulties are resolved, clinic service time can be reduced by up to 20%. On the other side, early patient solutions reduced 53.3 percent of crucial time, 20 percent of clinic time, and overall 30.3 percent of total wait period. Finally, on well-distribution lists, 54.2% of patients see improvement. The quality of healthcare services will increase and patient satisfaction will increase when patient wait periods are reduced.

A report on the causes of lengthy patient long waits and clinic overtime in outpatient clinics was released by Zhu et al. in 2012. Between the time of patient arrival and patient departure, a thorough time analysis was conducted. probable factors causing extended patient waiting times/clinic overtime were explored. The simulation and implementation results show that if the factors are addressed properly, significant improvement can be realized.

Oche and Adamu (2013) carried out a look at on the determinants of affected person ready time in a tertiary health institution's preferred outpatient branch (GOPD) in northern Nigeria. A established questionnaire become used to extract statistics from 100 patients in a descriptive cross-sectional studies. Sixty-one percentage of respondents waited 90-180 mins at the health facility, at the same time as 36.1

percent of sufferers spent much less than 5 mins inside the consulting room with the medical doctor. The maximum commonplace purpose of prolonged wait times in the GOPD was a large range of sufferers with a limited wide variety of healthcare team of workers. They concluded that, with the intention to attain the Millennium improvement dreams, there may be an pressing need to growth the number of health workers in GOPDs, which serve as a gateway to the sanatorium.

3.2. Previous studies related to the patient satisfaction in outpatient clinics

A descriptive cross-sectional study on patient satisfaction with outpatient services in a tertiary care facility was published in 2020 by Poudel et al. The findings showed a 74.78 percent overall satisfaction rate. The interpersonal style of health professionals was found to be the most satisfying, followed by communication, while the lowest level of happiness was found in accessibility and convenience. They concluded that medical personnel accessibility and availability were simply a source of concern.

Nielsen et al., (2005), published a study on satisfaction levels in orthopedic outpatients. The goal of this study was to find out what elements are linked to patient satisfaction when it comes to outpatient consultations. There was no link between not seeing the clinician expected and worse satisfaction, according to the findings. More information sources were linked to lower satisfaction. Patients were less satisfied when their treatment or outcome expectations were altered.

Ren et al., (2021) issued a document at the country of outpatient satisfaction in large hospitals and the factors that influence it. They looked tested information from the 2018 Henan big Hospitals affected person satisfaction Survey, which comprised 630 outpatients. The have a look at showed that general score for outpatient satisfaction in fundamental hospitals changed into 66.28 ± 14.73 . Ready time, medical doctor-affected person contact, expert services, and accessibility for treatment facts were confirmed to have without delay favorable

relationships with outpatient satisfaction. The largest elements determining outpatient pleasure, in line with BLR observe, were the patients' age and the variety of medical institution visits. They concluded that health center administrators would possibly reduce outpatient-ready instances and growth get admission to to remedy information to reinforce outpatient satisfaction.

3.3. Previous studies related to the Waiting times and patient satisfaction in outpatient clinics are related.

Xie and Or (2017) published a study on the correlations between long waits, service times, and patient satisfaction in an endocrinology outpatient department. The results of the current cross-sectional study, which examined the links between waiting period, perceived delay, and patient satisfaction with a number of features of the care they received, showed that patient satisfaction was adversely correlated with real wait period. Furthermore, sufferers who have been disillusioned with the sociocultural environment and the identity-oriented approach to their care tended to assume that the time they spent ready and obtaining care was too long. in addition they endorse that fitness-care vendors be recommended to retain to reveal empathy and recognize for patients, that sufferers accept personal areas in which they are able to talk with medical doctors without being overheard, and that hospital body of workers treat family contributors and pals who accompany patients with admire.

Dansky and Miles investigated patient satisfaction with ambulatory healthcare services: long waits and filling time (1997). The most important measure of patient satisfaction in their study was found to be the total amount of time spent sitting for the clinician. Patient satisfaction was significantly influenced by informing patients about the length of their wait and keeping them entertained while they waited. They concluded that they could be managed more efficiently to improve patient satisfaction, even if they could not be shortened.

Godley and Jenkins (2019) performed a Lean Six Sigma exceptional improvement assignment with the aim of lowering wait instances and enhancing affected person delight. In 3 regions: registration wait instances, check/treatment, and probability to refer, the effects display a statistically massive decrease in wait times and an increase in affected person pride degrees. They suggested that Lean Six Sigma was an awesome basis for decreasing wait instances and increasing affected person pleasure.

Ma et al. (2019) posted a study on extending predicted ready time to enhance outpatient satisfaction. They wanted to see if increasing the expected ready time (EWT) rather than decreasing the real waiting time could boost pleasure (AWT). When the pleasure degrees of the control and experimental corporations were in comparison, a significant difference become found whilst AWT = 2.zero. Unfavorable information was discovered to considerably extend EWT. A longer EWT could boost satisfaction levels.

Bleustein et al., (2014), studied wait times, affected person pleasure ratings, and the notion of care. They employed a questionnaire along with affected person pride and ready time questions from the health consumer assessment of Healthcare carriers and structures. at the same time as it's far widely recognized that longer wait times are associated with decrease medical company patient satisfaction rankings, the findings revealed that each aspect of the affected person revel in—specifically, patient confidence within the card issuer and perceived high-quality of care—correlated negatively with longer wait instances.

Camacho et al. (2006) conducted a move-sectional have a look at at the association among patient perceptions of ready time and pleasure with office-primarily based practices. Issuer scores declined by using 0.3 rating points for every 10-minute growth in ready time of 5 minutes or less for time spent with the physician. While the time spent with the medical doctor surpassed five mins, company rankings dropped by 0.1 rating point for each ten mins spent ready. The connection between

ready time and office pleasure observed a comparable trend; longer delays decreased the chance of returning. They concluded that shorter wait instances in primary and area of expertise care outpatient settings would possibly make contributions to better patient satisfaction and willingness to go back.

Toga-Sato et al., (2021) investigated the effect of real and perceived ready times on remedy satisfaction in outpatient diabetes care patients. They done a questionnaire survey wherein they were requested approximately their impressions of ready time (perceived ready time) and treatment pleasure (DTSQ). The findings exhibit that there's no great courting among real waiting time and DTSQ rating, whilst there are institutions with perceived ready time. Moreover, patients who notion the wait time turned into long have been greater disappointed with medical doctor and workforce replies than those who idea the wait time turned into short. They came to the conclusion that cutting actual wait instances and shortening perceived wait instances through growing clinical body of workers responses ought to assist enhance patient pride.

A prospective evaluation evaluation look at on improving patient satisfaction with time spent in an orthopedic outpatient hospital became posted by means of Levesque et al., (2000). The research was finished in 4 tiers. As an end result, usual time spent within the health facility decreased during stages 2, 3, and 4, however only between levels, 3 and 4 changed into extensively exclusive. Across phases 2, 3, and four, the share of patients who assessed their ready time as "true" extended. The study concluded that changing patient expectations and reducing total time spent in clinic could improve patient satisfaction.

4. Summary of findings related to the research variables

4.1. Out patient satisfaction score and its relationship with age of the patient

CA retrospective studies on an internet-based totally appointment device to improve outpatient-waiting instances became posted with the aid of Ao et al. in 2011. There had

been significant disparities in age, stage of pleasure, and normal ready time, in keeping with the findings gender, city residence, and legitimate ready time, then again, showed no tremendous versions. The 3 main motives supplied for no longer the usage of the web-based totally appointment gadget had been lack of knowledge of online registration, mistrust of the net, and lack of ability to apply a pc. The full non-attendance price for humans the use of the internet-primarily based appointment system changed into 14.four%, with non-attendance fees differing dramatically among medical institution departments, days of the week, and instances of the day. They determined that, in comparison to traditional queuing, the internet-primarily based appointment technique could improve patient pleasure with registration whilst also decreasing general ready time. But, the technology still wishes to be advanced before it may be extensively used.

Li et al. (2020) accomplished a scientific review of parameters related to outpatient pleasure in chinese tertiary hospitals. There had been 35 studies that met the inclusion standards, consistent with 36 papers. Outpatients expressed the very best levels of pride with medical doctors and nurses, in addition to the lowest stages of pride with clinic hygiene and outpatient methods, specifically the long wait times. Outpatient satisfaction has been linked to clinical staff's socio-demographic functions (e.g., age, marital status, income, and schooling degrees), professional competencies, and service attitudes. The findings cautioned that outpatient pleasure in China is probably significantly improved. To start, scientific service carriers' attitudes have to be stepped forward, mainly pre-analysis nurses, registration officials, and pharmacy counters. Furthermore, rules need to be devised to direct sufferers with commonplace ailments and minor discomforts to network health systems, alleviating the overburden in tertiary institutions that allows you to lessen ready times.

4.2. Out patient satisfaction score and its relationship with gender of the patient

Li et al., (2021) investigated the factors that influence patient wait times at a large tertiary hospital's nephrology department. They analyzed patient data from outpatient visits and hospital admissions using big data-enabled analysis approaches. The waiting period for patients was positively influenced by the patients' gender, the date the admission card was issued, the admission term that was used, and the registration interval. The type of disease that developed following kidney transplantation, the number of diagnoses, and the date the admission card was issued were all considered negative markers. They stated that these findings can be applied to other departments and that identifying the factors that determine waiting time can help improve patient happiness and hospital service quality.

4.3. Out patient satisfaction score and its relationship with Clinic type

Wait time as McMullen and Netland (2013) studied a determinant of general affected person delight in an ophthalmology sanatorium in a pass-sectional survey research document. The findings demonstrate that there was a giant hyperlink between the quantity of time sufferers waited and general patient satisfaction. Sufferers who have been disillusioned waited twice so long as people who have been glad, no matter whether or not they received free treatment. The most powerful determinant of total happiness turned into pride with the quantity of time spent waiting. They came to the conclusion that, no matter monetary state of affairs, decreasing the time patients wait to see a clinician can bring about extra usual affected person pride degrees.

Stefanovska and Petkovska (2014) carried out a cross-sectional have a look at comparing patient satisfaction in secondary and tertiary outpatient healthcare offerings. sufferers were a lot happier in tertiary outpatient healthcare centers than in secondary outpatient healthcare facilities in almost every element of evaluation regarding fashionable settings, nurse/administrative staff overall performance, and health practitioner overall performance, consistent with the findings. sufferers in secondary healthcare offerings (SHCS) have

been happier than the ones in tertiary healthcare services (THCS), however handiest in phrases of records about vicinity and get right of entry to to and motion in the department. The imply usual satisfaction ratings for sufferers' gender, age, marital status, academic degree, employment, and number of visits did not vary appreciably, consistent with data evaluation. They determined that the modern level of patient-issuer connection and conversation, in addition to the sanatorium surroundings, ought to be progressed, with unique attention paid to the trouble of affected person ready time and clinic forms.

4.4. Out patient gratification score and its relationship with Visit type

In a move-sectional look at in a chinese language tertiary medical institution, Xie et al. (2019) checked out the impact of a comprehensive reservation carrier for non-emergency registration on appointment registration fee, affected person ready time, affected person pleasure, and outpatient extent. The patient waiting time was substantially reduced after the deployment of the entire reservation carrier, and the percentage of sufferers who thought the ready time needed to be progressed turned into significantly reduced. Furthermore, the final results of a third-birthday celebration evaluation of outpatient pleasure improved dramatically. The department of wellknown Pediatrics' outpatient quantity has declined. They concluded that the medical institution's deployment of a complete reservation provider for non-emergency registration reduced patient wait instances and superior patient delight, at the same time as efficaciously controlling outpatient demand.

Eilers (2004) did a observe on the way to improve patient pride with waiting instances. College students gave the lowest rankings to ready time of any of the said classes, with fifty eight percent giving it an general A, sixty three percent for deliberate appointments, and forty one percentage for the walk-in sanatorium. The midpoint implemented timetable and reception area improvements as part of a quality improvement effort. Three months later, a follow-up study revealed that the walk-in clinic

received A ratings from 73 percent of respondents overall, 81 percent for planned appointments, and 56 percent for the walk-in clinic. A four-month follow-up study revealed 79 percent overall satisfaction, 85 percent for planned appointments, and 68 percent for the walk-in clinic.

4.5. Out patient satisfaction score and its relationship with Waiting time

Anderson et al., (2007) investigated the hyperlink between patient to come time, willingness to go back for care, and patient delight ratings with number one care physicians in a move-sectional study. As a result, higher wait instances had been related to decrease affected person delight; but, the quantity of time spent with the health practitioner became the most important predictor of patient happiness. With extra time spent with the physician, the decrease in satisfaction related to extended wait instances is significantly minimized (5 mins or greater). Importantly, a long wait time for a medical doctor's appointment mixed with a brief scientific go to is related to very low ordinary affected person satisfaction. They said that improving patient pride ranges by decreasing patient ready times on the expense of time spent with the affected person might be counterproductive.

Ready time is a sturdy predictor of affected person pride in a primary army clinic, in keeping with Bar-dayan et al., (2002). They created a version with an unmarried, remoted intervention and measured patient pleasure earlier than and after it. Documenting a massive alternate in publish-intervention wellknown pleasure after actually enhancing one region of affected person care can offer us with useful data about the intervention's significance. They theorized that the quantity of time spent booking an appointment and ready on the hospital contributes substantially to typical pleasure. As a result, they altered this component by modifying clinic scheduling and waiting periods. The time it takes to get into a clinic has been drastically reduced. Overall, patient satisfaction increased significantly because of this single intervention. They discovered that patient satisfaction is directly

correlated with clinic accessibility and long waits.

5. Advantages of the current study over earlier studies

The current study will gain knowledge from earlier research in terms of planning the methodology, defining the variables and goals, creating and designing the questionnaire, choosing the statistical techniques to be applied to the data analysis, and discussing the study's findings.

In terms of examining the relationship between long waits and outpatient satisfaction, the current study was in agreement with earlier research. Additionally, it can quantify the level of patient pleasure among those who visit KAMC outpatient clinics.

6. Comparisons between the present study and earlier studies

It stands out as the first study to address this subject in King Abdullah Medical City and the surrounding area of Makkah.

It is also distinguished by the fact that, according to the results of the literature review, many studies have been conducted in a similar vein as this intended research. However, it should be noted that none of these studies examined the relationship between outpatient enjoyment and particular variables.

7. Break in Literature

According to the reviewed literature, it is evident that Saudi Arabia's healthcare system is increasingly interested in research on the relationship between waiting time and patient satisfaction in outpatient clinics. to determine whether there is a proven relationship between all research variables at Saudi Arabian hospitals and the waiting time and patient satisfaction in outpatient clinics by conducting a review of the literature. However, more study is required to fill in any information gaps that may exist. Stefanovska and Petkovska (2014) released a survey comparing patient satisfaction in secondary and tertiary outpatient healthcare services. According to the results, there was no discernible variation in patients' mean overall

satisfaction scores based on their gender, age, and marital status, level of education, employment, or number of visits. Therefore, the purpose of this study is to determine the relationship between patient satisfaction and waiting times at the outpatient clinics of King Abdullah Medical City in Makkah.

8. Episode Instant

In terms of the correlation between longer waits and better patient in outpatient clinics and its relationships with various variables, the researcher is aware of some gaps that need to be filled. The absence of adequate research to exclude the domain of triaging process is probably to blame for the gap in the literature. The relationship between queue length and patient experience may be easily seen thanks to this finding, which can also help healthcare organizations learn how to increase consumer care.

RESEARCH METHODOLOGY

1. "Preface"

The study methodology is covered in this chapter, starting with the research design, moving on to data collecting, which covers the data gathering tool and method, sampling, which covers sample size and technique, ethical consideration, and chapter summary.

2. "Research Method":

Descriptive-analytical research design is the study kind. Data are categorized, described, compared, and measured in descriptive research. Analytical study, however, is concerned with cause and effect. This methodology though intensively collected information to describe the phenomenon. But goes beyond deeply, to analyze the phenomenon and to manifest relationships between the different study variables, to interpret them, and come to findings contribute to improving and developing the situation.

3. Data Collection

3.1. Data Collection Tool

The data contain socio-demographic features of the participants: Sex, Oldness, Nationality, Place of resident and type of visit. The investigator collected the socio demographic data from patients' electronic/files onto data collection forms not showing any nominative information. Other data included patient waiting time and patient satisfactory score, which was collected from the hospital quality department and patient experience department data during the period of 2021. The information-included on waiting time is waiting time from appointment to Physician encounter > 20 minutes. Data was immediately transferred to a statistics database after verification.

3.2. Data Collection Methods

Investigator composed facts from the available electronic medical records and quality management department's database system of king Abdullah medical city. Successive training encryption and marks identified patient. A separate identification record sheet that was stored in a secure, locked location links these to the patient's name and MRN. The patient satisfaction data collected from patient experience department data system and the data regarding waiting time from appointment to Physician encounter > 30 minutes collected from hospital quality department.

4. Study Participants and Sampling

All the patients presented to the KMAC out patient in a period 2 months period were eligible by using simple random sampling methods if they had the inclusion criteria. Patients attending family medicine or specialty clinics throughout the study period and who were 18 years of age or older, able to understand Arabic or English, and interested in participating in the study were eligible for inclusion in the study.

5. Sample size

The complete amount of data was collected over the course of one month, with an

estimated 16000 patients. An estimated 800 patients visited the outpatient section each day. Assuming a minimum response rate of 50% and a confidence range of +/-5%, the minimal sample size by the total number of patients is 375. The study included 499 patients.

6. "Ethical Considerations"

According to letter 22-884 from the KAMC research center dated 13/1/2022, IRB approval was received. The research process preserved confidentiality at all times. In order to get their assistance, the study's objective and an information section outlining the study's specifics are included in the survey. Questions did not identify participants. The researcher preserved the participants' anonymity and confidentiality in this way.

7. "Data Security"

After the research was completed, all data was erased. All data files were secured and were only used by the researcher.

8. Chapter Summary

Descriptive-analytical research design is the study kind. Carried performed at KAMC with the study group of patients who were seen in the outpatient department of King Abdullah Medical City (KAMC). The data contain socio-demographic appearances of the participants: Femininity, Stage, and Nationality, Place resident and type of visit. The investigator collected the socio demographic data from patients' electronic/files onto data collection forms not showing any nominative information. Other data included patient waiting time and patient satisfactory score, which was collected from the hospital quality department and patient experience department data during the period of 2021. The information-included on waiting time is waiting time from appointment to Physician encounter > 20 minutes. The obtained data analyzed quantitatively. Quantitative data was analyzed using SPSS version 25 to determine the key trends and statistics. The frequency and percentage values for the category variables were shown. IRB approval was granted.

DATA ANALYSIS AND RESULTS”

1. “Preface”:

The research's core chapter, in which the researcher presents his findings, begins with research findings, moves on to inferential analysis, and concludes with a summary of the chapter.

2. “Research Results”

Table 1: Socio demographic characteristics of the participants

Characteristics	Categories	Frequency (Mean)	Percentage (SD)
Gender	Male	278	55.7%
	Female	221	44.3%
Age Group (years)	18- 29 Years	123	24.6%
	30- 39 Years	91	18.2%
	40-49 Years	53	10.6%

	50+ Years	232	46.4%
“Nationality”	“Saudi”	476	95.4%
	“Non Saudi”	23	4.6%
Place of Resident	Inside Makkah	286	57.4%
	Outside Makkah	213	42.6%
Visit type	New	111	22.2%
	Follow up	388	77.3%

Socio demographic data collected from 499 patients. Most of the patients was male (55.7%) and most of the patient was the age above 50 years (46.4%). In regards to the nationality of the patient majority of them were Saudi patients (95.4%) on this 57.4% were coming from Makkah region and 77.3% of patients coming for follow-up visit and remaining 22.2% came to clinic as new patients. (Table 1)

Table 2: Relationship between Patient satisfaction score and demographic variables

Characteristics	Dissatisfied N (%)	Satisfied N (%)	p-Value
Gender			
Male	16 (5.8)	262 (94.2)	<0.001
Female	145 (65.6)	76 (34.3)	
Age			
18 – 29 Years	70 (56.9)	53 (43.1)	0.044
30 – 39 Years	53 (43.1)	38 (41.8)	
40 – 49 Years	23 (43.4)	30 (56.7)	
50 + Years	100 (43.1)	132 (56.9)	
Nationality			
Saudi	230 (48.3)	246 (51.6)	0.192

Non Saudi	12 (52.1)	11 (47.8)	
Place of Resident			
Inside Makkah	132 (46.15)	154 (53.8)	0.214
Outside Makkah	112 (52.6)	101 (47.4)	
Visit Type			
New	85 (76.6)	26 (23.4)	0.001
Follow – up	180 (46.4)	208 (53.6)	

The above table shows the relationship between outpatient satisfaction and demographic variables. Nearly half of the patients said they were satisfied, but the other half did not. Between participants of each gender, there

were statistically significant differences in the satisfaction score (P 0.01), age groups (0.044) and visit type (P 0.001). There is no statistical differences between satisfaction score with nationality and place of resident [Table 2].

Table 3: Association a balance between patient satisfaction and wait time score

“Waiting time”	Overall N (%)	Dissatisfied N (%)	Satisfied N (%)	p-Value
Between arrival and registration time (min)				
≤ 20	458 (91.7)	209 (45.6)	249 (54.4)	<0.001
>20	41 (8.2)	37 (90.2)	4 (9.8)	
Between registration and consultation time (min)				
≤ 20	297 (59.6)	100 (33.7)	197 (66.3)	<0.001
>20	202 (40.4)	146 (72.3)	56 (27.7)	
Consultation time (min)				
≤ 20	352 (70.7)	172 (48.9)	180 (51.1)	0.813
>20	147 (29.3)	74 (50.3)	73(49.7)	
Overall waiting time (min)				
≤ 20	188 (37.7)	73(38.8)	115 (61.2)	0.001
>20	311 (62.3)	174(55.9)	137 (44.1)	

Nearly half of the patients said they were satisfied after witnessing the correlation between long waits and satisfaction, but the other half did not. According to the test results, average wait had a substantial impact on the satisfaction ratings. Between arrival and registration, more than 90% of unsatisfied patients waited longer than 20 minutes ($P = 0.01$). In addition, most of participants who waited more than 20 minutes shows that they were dissatisfied. The test result also shows association among to come time and fulfilment except consultation time it shows that no statistical relationship. [Table 3].

Table 4: Predictors of Patient Satisfaction

Characteristics	OR	95% CI for OR
Age	1.6	1.0-2.1
Gender	0.2	0.0-0.03
Type of visit	1.0	0.4-2.8
Waiting time		
Between arrival and registration	0.3	0.0-0.7
Between registration and consultation	0.6	0.2-0.9
Consultation time	0.4	0.2-0.7
Overall waiting time	1.3	0.5-2.2
OR = Odds ratio, CI = Confidence interval		

Age, gender, and type of visit are shown as significant predictors of user care in Table 4 of the multiple univariate logistic regression analysis. Additionally, specific waiting lists, such as the time between arrival and registration (OR: 0.1, $P = 0.02$, 95% CI: 0.0-0.7), the time between registration and consultation (OR: 0.4, $P = 0.02$, 95% CI: 0.2-0.9), and the time during the consultation (OR: 0.3, $P = 0.01$, 95% CI: 0.2-0.7), were significantly associated with patient satisfaction. Between arrival and registration, patients who waited no longer than 20 minutes

were more likely to report being satisfied than those who waited longer.

3. Chapter Summary

The timely, effective, and patient-centered delivery of high-quality healthcare is influenced by patient happiness, and patient satisfaction is linked to clinical outcomes, making it a key indicator for determining the quality of healthcare. In a Saudi Arabian tertiary hospital, the aim of this descriptive-analytical study design is to investigate the relationship between long waits and care quality. As such, this aims achieved through the following objectives such as to assess waiting time from arrival to see the consultant inside the clinic, to identify factors predicting patient satisfaction and waiting time. The findings indicate that while about half of the patients were satisfied, the remaining half was not. Participants' satisfaction scores varied significantly according on their gender, age group, and type of visit. There is no statistical differences between satisfaction score with nationality and place of resident. The outcome also demonstrates that waiting time had a substantial impact on the satisfaction score. Between arrival and registration, more than 90% of unsatisfied patients waited longer than 20 minutes. In count, most of the participants who waited more than 20 minutes shows that they were dissatisfied. The test result also shows association between to come time and approval except consultation time it shows that no statistical association. Finally, the findings showed that patient satisfaction was significantly predicted by age, gender, and kind of visit. Additionally, certain waiting intervals—such as those between arrival and registration, registration and consultation, and consultation time—were strongly associated with patients' happiness. Between arrival and registration, patients who waited no longer than 20 minutes were more likely to report being satisfied than those who waited longer.

DISCUSSIONS

1. "Preface":

This chapter contains a full explanation of the research findings, support from earlier investigations, and a summary of the chapter.

2. Discussion:

The timely, effective, and patient-centered delivery of high-quality healthcare is influenced by patient happiness, and patient satisfaction is linked to clinical outcomes, making it a key indicator for determining the quality of healthcare. In a Saudi Arabian tertiary hospital, the aim of this descriptive-analytical study design is to investigate the relationship between waiting time and patient satisfaction. As such, this aims achieved through the following objectives such as to assess waiting time from arrival to see the consultant inside the clinic, to identify factors predicting patient satisfaction and waiting time in KAMC, Makkah, Saudi Arabia

Nearly half of the patients were satisfied, while the remaining patients weren't, according to the results report. 499 valid respondents were included. According to the data, Most of the patients was male (55.7%) and most of the patient was the age above 50 years (46.4%). In regards to the nationality of the patient majority of them were Saudi patients (95.4%) on this 57.4% were coming from Makkah region and 77.3% of patients coming for follow-up visit and remaining 22.2% came to clinic as new patients.

The findings indicate that while about half of the patients were satisfied, the remaining half was not. Given the sample size, this level of user care is seen as being relatively low, and the results are consistent with a recent Saudi study that measured patient satisfaction with longer waits at clinics and found that it may fall as low as 62%. (Al-Abbadi et al., 2019). The same conclusion was reached in a study carried out in a primary healthcare environment in Botswana, which found that 63.9% of patients said they were displeased about long queues. 2016 (Pandit & Varma) Patients who waited for more than 30 minutes reported a 62.5%

perception of the quality in another survey. (Kumari et al., 2009). At a research by Med et al., the same outcomes were attained in primary healthcare clinics in Riyadh. Long wait times were discovered to result in a higher rate of patient dissatisfaction, particularly between registration and consultation. The study carried out by Al-Moajel et al. in a primary healthcare facility in Jubail City, to investigate the level of client satisfaction with several primary care services, one of which was waiting time, is in agreement with that. In the study, there was a bad correlation between waiting periods and patient pleasure.

According to the results of this study, there were statistically significant changes in the participants' satisfaction scores depending on their gender, age group, and type of visit. No statistically significant variations exist between satisfaction scores for nationality and residence. This finding is consistent with other research, such as one conducted at the Eye Specialist Hospital in Riyadh, where the satisfaction score was determined using sitting period and other demographic parameters like age, education level, income, and ethnicity. According to the study's findings (Alahmari et al., 2015), patients had a favorable opinion of the outpatient wait period, and there was a correlation between customer pleasure scores and demographic characteristics. Same result also supported by De Salins et al., 2016 that Patient age was significantly related to overall satisfaction.

The outcome demonstrates that lead times and the satisfaction score are related. Between arrival and registration, more than 90% of unsatisfied patients waited longer than 20 minutes. Additionally, the majority of participants who waited longer than 20 minutes indicated that they weren't happy. The comparability of our findings to those of other studies may be influenced by a number of factors. Consultation duration varies per nation. For instance, according to Groenewegen and Hutten (1991), the average family medicine consultation in Britain lasts 5 to 8 minutes, whereas in Sweden and the United States, it typically lasts 10 to 20 minutes or longer. [(Davidoff F, 1997, Dugdale et al., 1999,

Andersson & Mattsson, 1989]. The average outpatient wait time in the United States was over 30 minutes, according to another study (Anderson et al., 2007). However, Service et al. also found that patients would report being satisfied with their wait if they arrived on time and within 37 minutes of the scheduled time, and if they arrived after the scheduled time by about an hour. This suggests that to come times longer than 20 minutes are not unusual.

The test results also indicate that there is a statistically significant correlation between standing delay and comfort, with the exception of consultation time. These findings are in line with a previous Saudi study by Aldaqal et al. in the Department of Surgery at the University Hospital in Jeddah, which found that queuing periods affected patients' opinions on the caliber of their care and their happiness. Another study confirmed the well-established link between higher wait times and lower clinical provider patient satisfaction scores. (Bleustein and others, 2014)

Finally, the findings showed that patient satisfaction was significantly predicted by age, gender, and kind of visit. Additionally, some waiting intervals (such as the time between arrival and registration or between registration and a consultation) were substantially correlated with patient satisfaction. According to some of the study's analysis findings, outpatient satisfaction has been linked to sociodemographic traits (such as age, marital status, income, and level of education), professional abilities, and service attitudes of medical staff. There were substantial disparities in age, level of satisfaction, and overall waiting time, according to (Li et al., 2020). Gender, urban residency, and legitimate waiting time, however, did not significantly differ from one another. (Cao et al., 2011) The data analysis revealed that there were no appreciable differences in the mean overall satisfaction scores among patients according to their gender, age, and marital status, level of education, employment, or number of visits. (Petkovska, Stefanovska, and 2014). According to the study, patients who waited less than 20 minutes between their arrival and registration were more likely to report being satisfied than

those who waited longer. Given that high wait times were a contributing factor in patient dissatisfaction, the Institute of Medicine recommended that at least 90% of patients be seen within 30 minutes of their planned appointment. (Vineeth & Yeddula, 2012; Senti & LeMire, 2011)

3. Chapter Summary

Waiting time, which is a crucial component in determining service quality, could be a useful instrument for assessing patient satisfaction. There has not been any research into this topic in Saudi Arabia's Eastern region. This study therefore has the potential to improve the general standard of healthcare outcomes and services. At King Abdullah Medical City in Makkah, the purpose of the study was to examine the connection between long waits and care quality, as well as assess factors that affect patient satisfaction and waiting time, in order to guide future studies and initiatives to improve the quality. The findings indicate that while about half of the patients were satisfied, the remaining half was not. The satisfaction score varied statistically significantly depending on the participant's gender, age group, and type of visit. There is no statistical differences between satisfaction score with nationality and place of resident. The result also shows that the approval score diverged pointedly by to come time. In addition, most of the participants who waited more than 20 minutes shows that they were dissatisfied. Finally the result identified that age, gender and type of visit as significant predictors of patient satisfaction.

CONCLUSION AND RECOMMENDATIONS

1. "Preface":

The researcher will outline the paper's contribution, strengths and weaknesses, implications and suggestions, recommendations for further study, and conclusion in the last chapter.

2. “Principle Findings”

The current study intends to look at the relationship between long waits and better patient in King Abdullah Medical City (KAMC) outpatient clinics in Makkah. The findings indicate that while about half of the patients were satisfied, the remaining half was not. Participants' satisfaction scores varied greatly according on their gender, age group, and type of visit.. There is no statistical differences between satisfaction score with nationality and place of resident. In addition, most of the participants who waited more than 20 minutes shows that they were dissatisfied. Finally the result identified that age, gender and type of visit as significant predictors of patient gratification. Patients who arrived and registered in less than 20 minutes were more likely to report being satisfied than those who arrived and registered in more than 20 minutes.

3. Research Contributions

This research represents to evaluating out patients satisfaction and its relation with waiting time and to focuses on control the waiting period it takes to see a consultant clinic. The patients asked to express the relation between waiting time and out patient satisfaction, what they believe to be factors that help to increase patient happiness. These research results can help healthcare leaders identify the gaps needed to introduce new improvements. This research report can be used by the hospital administration to create a project aimed at enhancing the quality of care for outpatients. Based on the results, the healthcare organizations can put new initiatives in place to raise patient experience. As part of Saudi Arabia's Vision 2030, the ministry of health will be preparing to adopt new techniques to increase patient pleasure and experience in the healthcare settings. Hospitals still need to make changes in this area, that also addressing out patient satisfaction results will be an important part of delivering high-quality healthcare services in Saudi Arabia.

4. “Strengths and Limitations of the Study”

The contributions of this study will serve as a foundation for health care leaders as they implement changes in the healthcare system, develop protocols and strategies to increase the satisfaction of outpatient patients and decrease outpatient wait times, and adopt new interventions that will support the development of innovative healthcare strategies. It is crucial to make sure that healthcare officials get used to novel interventions for improving the quality of outpatient services in order for improvements to be institutionalized in healthcare systems.

The absence of the perceptions of all training participants was a limitation of this study. As a result, the outcome cannot be fully represented at the organizational level. Generalization to include the rest of Saudi Arabia is impossible because it was only undertaken at one hospital. The satisfaction rating is based on a self-reported online survey, but if participants are directly interviewed, more suggestions and ideas for implementing new interventions to raise outpatient satisfaction can be obtained.

5. “Implications and Recommendations”

This study's findings will assist healthcare administrators in putting new interventional plans into practice to increase outside patient satisfaction and decrease patient wait times in healthcare facilities. The study's findings that queuing times and patient happiness are significantly correlated with one another as well as with some particular demographic factors may aid healthcare officials in developing a strategic plan to cut down on wait times and boost patient satisfaction. The results of this study advise healthcare executives to identify potential areas for improvement in patient happiness and experience.

6. “Direction for Further Research”

This study makes a compelling case for additional experimental research that employs interventions to shorten outpatient wait times, increase patient happiness, and evaluate the

efficacy of those interventions in healthcare settings. Results can be used by health care leaders to implement national level strategies to lower outpatient waiting times in healthcare organizations in the Kingdom of Saudi Arabia. Findings may help to conduct a quality improvement program and can identify the patient's perceptions on waiting time and satisfaction under the healthcare settings.

7. Conclusions:

This study was a descriptive-analytical research design to identify the overtone between in the offing time and patient pleasure in casualty clinics in King Abdullah Medical City (KAMC) at Makkah. This study was aimed to assess waiting time from arrival to see the consultant inside the clinic, to identify factors predicting patient satisfaction and waiting. 499 valid respondents were included. According to the data, Most of the patients was male (55.7%) and most of the patient was the age above 50 years (46.4%). In regards to the nationality of the patient majority of them were Saudi patients (95.4%) on this 57.4% were coming from Makkah region and 77.3% of patients coming for follow-up visit and remaining 22.2% came to clinic as new patients.

The findings indicate that while about half of the patients were satisfied, the remaining half was not. Participants' satisfaction scores varied significantly according on their gender, age group, and type of visit. There is no statistical differences between satisfaction score with nationality and place of resident. The result also shows that the satisfaction score have an association pointedly by ahead of you time. Between arrival and registration, more than 90% of unsatisfied patients waited longer than 20 minutes. Then again, most of the participants who waited more than 20 minutes shows that they were dissatisfied. The test's findings also indicate a substantial link between waiting time and satisfaction. except consultation time it shows that no statistical relationship. Finally, the findings showed that patient satisfaction was significantly predicted by age, gender, and kind of visit. Patients who waited for less than 20 minutes between arrival and registration were more likely to be satisfied

than those who waited for more than 20 minutes. Additionally, specific long waits (between arrival and registration, between registration and consultation, and consultation time) were significantly related to patients' pleasure. In order to gain a fundamental grasp of the patients' ideas on how to improve their satisfaction, healthcare organizations should concentrate on the necessity of assessing the patients' satisfaction in connection to waiting times in outpatient departments. This outcome can aid healthcare organizations in determining where they need to improve. In order to reduce outpatient waiting times, improve patient happiness, and determine the efficacy of interventions in healthcare settings, additional experimental research is necessary.

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