

The Impact of Medical Insurance Benefits on Employees'
Psychological Stability and Medical Fraud Prevention: A Case
Study of a Pharmaceutical Company in Saudi Arabia

Student Name

Sajjad Alshaikh

253002957

Supervision: Dr. Al-Faisal Abdul Hamid Mohammed Hassan

Dr. Fayez Jarad

2026

Acknowledgment

I would like to express my sincere gratitude to everyone who supported and encouraged me throughout the completion of this research. My heartfelt appreciation goes to my supervisor for the valuable guidance, constructive feedback, and continuous support provided during every stage of this study.

I also extend my thanks to the faculty members and colleagues who shared their knowledge and expertise, as well as to all participants who generously contributed their time and effort to this research. Their cooperation was essential to the successful completion of this work.

Finally, I am deeply grateful to my family and friends for their unwavering encouragement, patience, and understanding. Their continuous support has been a constant source of motivation throughout this journey.

Table of content

Acknowledgment	2
Chapter 1: Introduction	7
1. Introduction	7
2. Problem Statement	9
Study Importance	11
First: Scientific Significance	11
Second: Practical Significance	11
Study Purposes	12
Main Objective	12
Specific Objectives	12
Study Questions	13
Main Research Question	13
Sub-Questions	13
Research Hypotheses	14
Theoretical Model	14
Purpose of the Model	14
Theoretical Foundations	15
Variables and Proposed Relationships	16
Operational Model	16
Chapter 2: Literature Review	18
Introduction	18
Dependent Variable	19
Employees' Psychological Stability	19
Medical Fraud Prevention Effectiveness	20

Independent Variable: Medical Insurance Benefits	22
Summary of Past Studies.....	24
Contribution of the Current Study.....	25
Theoretical Framework of the Study.....	25
Independent Variable: Medical Insurance Benefits	31
Dependent Variable	32
Employees' Psychological Stability	32
Medical Fraud Prevention Effectiveness.....	36
Independent Variable	41
Chapter 3: Research Methodology	47
Introduction	47
Research Design.....	47
Population of the Study	49
Sample Characteristics	50
Sample Size Determination	52
Data Collection Procedures	54
Questionnaire Development	55
Content Validity.....	56
Pilot Study	56
Ethical and Administrative Preparation	57
Questionnaire Distribution.....	57
Collection and Screening	58
Data Coding	58
Confidentiality and Data Protection	58
Study Delimitations	59
Temporal Delimitation.....	59
Spatial Delimitation	59
Human Delimitation.....	60

Subject Delimitation	61
Method of Analysis	62
Data Screening	62
Descriptive Statistics	63
Reliability Analysis	64
Validity Assessment	64
Correlation Analysis.....	65
Regression Analysis	65
Differences According to Demographic Characteristics.....	66
Statistical Significance	67
Chapter 4: Practical Study.....	68
Data Analysis.....	68
1. Sample Determination and Data Screening	68
2. Sample Characteristics	68
2.1 Q3. Gender	68
2.2 Q4. Age Group.....	69
2.3 Q5. Highest Educational Qualification.....	70
2.4 Q6. Department or Functional Area	71
2.5 Q7. Total Years of Work Experience	72
3. Descriptive Analysis of Questionnaire Items	73
3.1 Medical Insurance Benefits	74
3.2 Employees' Psychological Stability	75
3.3 Insurance Awareness and Responsible Healthcare Use.....	76
3.4 Medical Fraud Prevention and Monitoring	77
4. Construct-Level Descriptive Statistics and Reliability.....	78
5. Hypothesis Testing.....	79
6. Regression Analysis	80
7. Differences According to Sample Characteristics	80

8. Improvement Priorities and Open-Ended Responses	82
9. Overall Statistical Conclusion	84
Appendix: Statistical Variable Key.....	84
Research Findings and Discussion.....	85
Introduction	85
Findings Related to Medical Insurance Benefits.....	85
Findings Related to Employees' Psychological Stability	87
Findings Related to Coverage Adequacy	89
Overall Discussion	95
Research Recommendations	96
7. Protect Legitimate Healthcare Access	99
8. Establish a Confidential Reporting Mechanism	100
9. Monitor the Insurance Program Through Key Performance Indicators	100
10. Provide Additional Psychological Support	101
11. Revise the Questionnaire Before Future Use	101
12. Conduct a Stronger Pilot Study.....	102
13. Use Objective Claims Data in Future Research	102
14. Use a Longitudinal or Mixed-Methods Design	103
16. Implement Organization-Wide Improvements	104
17. Evaluate Recommendations After Implementation.....	104
After implementing the recommended changes, the organization should conduct a follow-up evaluation to measure:	104
References	105

Chapter 1: Introduction

1. Introduction

Pharmaceutical firms rely on processes that are precise, recorded, and in line with regulations. Any errors in manufacturing, quality assurance, logistics, and medical communication could result in issues that may extend beyond the person making the error. Employees operate in an environment where time constraints, scrutiny, and accountability form part of daily operations. It follows that the well-being of employees is intertwined with organizational effectiveness. The inclusion of medical insurance within the welfare package is one element, since it influences the ability of employees to seek medical attention and their sense of security.

Employer-provided health insurance is another factor which makes up the regulatory framework for private sector workers in Saudi Arabia. This is based on the Co-op Health Insurance scheme where eligible employers are obligated to provide insurance cover for their employees and eligible dependents (Council of Health Insurance, 2023). However, having an insurance card in one's possession cannot be taken as a measure of the protection offered under the program. Rather, it is the constraints that are inherent in the program which form the subject of this case study.

The study emerged from a simple organisational problem: is it possible for an insurance benefit to act as a resource which provides greater security to employees? The job demands-resources theory serves as a good initial framework since it provides insights on how the resource provided by the organisation reduces some stress associated with job demands (Bakker & Demerouti, 2017). From a perspective of this study, the insurance will reduce the risk associated with costs of treatment and accessibility. At the same time, the insurance will become an additional source of frustration due to the delay of approval and inaccessibility of hospital facilities.

It becomes clear that the effectiveness of a medical insurance plan is felt not only through its coverage but also through the process of administration. An employee who believes in the system and has the assurance of receiving help because of the proper understanding of the system will be assured even before accessing the plan. There will be another employee who is covered by the same plan and remains worried about a declined claim or an ambiguous explanation.

The other problem relates to the manner in which the insured services are being utilized. The repeated visits, double billing, card sharing, false reporting, and cooperation with the service providers can present problems regarding money and management. The activities are different and are not being viewed as one in this study. The frequent utilization could be due to chronic disease, pregnancy, rehabilitation, preventive medicine, or even a short-term medical situation. However, fraud has to involve deceit, which means something more than high utilization.

The organisational case was selected via the activities of an insurance brokerage firm that handles the medical insurance accounts of companies, with some accounts being in the pharmaceutical industry. Insurance brokerage entails looking at the claim pattern, coordination with the insurer, approval, and advice to the client regarding costs and risks. An early examination of the account of the participating company revealed certain patterns that needed to be examined, such as frequent and repetitive use. These served as the practical foundation for the research without assuming fraud.

It is necessary to take into consideration the clinical and organisational context in order to interpret the claims information. It is impossible to determine whether the procedure was necessary, whether the employee knew about the conditions of receiving benefits, or whether the influence of the medical practitioner could affect the pattern through a frequency analysis only. That is why the questions about the quality of benefits, security, awareness, responsible use, and monitoring were included in the study.

There is extensive literature on the topic of employee well-being, organizational support, the use of health insurance, and anti-fraud controls; however, these issues are typically studied independently. There is very little information regarding how all of these interact within an organization from the perspective of a Saudi Arabian pharmaceutical organization. This current case study helps to fill this gap.

The present research, then, investigates the way employees perceive the sufficiency and availability of their insurance coverage, the association between such perceptions and psychological stability, and the connection between awareness/monitoring and the decreased likelihood of abuse. This study, in turn, discusses patterns of utilization of healthcare services without making assumptions about abuse.

Contributions to the field come from the academic and practical perspectives. Academically, the study tests an integrated framework within a context that has not been much considered directly. Practically, the study gives the involved company, broker, and insurer information about the sources of uncertainty among their employees and the issues that they feel should be improved upon.

2. Problem Statement

Medical insurance is considered an integral part of the employee welfare package of Saudi private companies, especially those operating under strict regulations in certain industries like the pharmaceutical industry. Prior studies have found that organizational benefits, which include medical insurance, serve as resources that help improve employees' mental well-being and lessen their stress at work (Bakker & Demerouti, 2017). On the other hand, studies conducted regarding insurance schemes have identified the dangers of abuse and fraud in situations where individuals have adequate knowledge of medical insurance processes (Association of Certified Fraud Examiners, 2022).

While the above is the case, most of the literature on the topic has been devoted to investigating psychological well-being of employees and insurance fraud separately without looking at how these two aspects relate in one organization.

In the organizational context for this case study, a drug manufacturing firm whose employees are enrolled under a group employer medical insurance plan, initial observations were made showing irregularities in utilization of healthcare facilities among some employees. Such irregularities consisted of constant use of medical facilities, repeated claims made over a short period of time, and utilization levels needing further clarification. Though this behavior does not mean that there was definite fraud, it can be associated with misuse of benefits, ignorance, discontentment with coverage, or even exploitation.

Another issue to be noted is that the views held by the employees concerning the advantages related to the health insurance can influence their psychological stability. The uncertainty associated with the insurance coverage or the problems faced when accessing medical assistance can result in the occurrence of stress and dissatisfaction.

It is for this reason that the problem of the present study can be seen in the poor understanding of the correlation between insurance benefits and the psychological stability of employees, as well as the poor proof of the effectiveness of insurance management techniques that can decrease medical fraud without impairing access to healthcare by employees.

The research will be concerned with the employees participating in the employer medical-insurance program of a pharmaceutical company in Saudi Arabia, in an attempt to answer the following research question:

To what extent do the medical-insurance package enhance employees' psychological stability, and how effective are current insurance management practices in preventing medical fraud within the organization?

Study Importance

First: Scientific Significance

1. The study adds value to the existing knowledge base by looking into the relationship between the medical-insurance bundle and the psychological stability of the workers in the pharmaceutical industry, an area that has been relatively understudied in the past.
2. The study brings together different approaches, including human resource management, healthcare management, and fraud management, in one study framework rather than analyzing each of these aspects separately.
3. An empirical study of the Saudi Arabia setting is conducted, which adds value to the local research agenda and helps future studies of this type in other industries.
4. The study improves understanding of how benefit programs can affect employee behavior, in addition to their general well-being.

Second: Practical Significance

1. The study can be used by organizations to create better medical insurance programs that would increase job satisfaction and psychological stability of their employees.
2. The results from the study can be helpful for insurance brokers and providers in monitoring the use of health services and detecting any anomalies without limiting access to them.
3. The results from the study can be helpful in creating awareness programs that encourage responsible use of medical insurance by employees.
4. The study is beneficial for decision makers who need to control costs and prevent fraud while at the same time providing top-notch healthcare services to their employees.
5. The study can help the organization to achieve its objectives that are consistent with national development goals in Saudi Arabia.

Study Purposes

Main Objective

To examine the impact of the medical-insurance package on employees' psychological stability and to evaluate their role in preventing medical fraud within a pharmaceutical company in Saudi Arabia.

Specific Objectives

1. To evaluate the perception of employees about their medical insurance benefits in regard to adequacy and accessibility.
2. To determine the connection between medical insurance benefits and psychological well-being of employees.
3. To evaluate the patterns of medical services consumption by employees.

4. To detect possible risks and markers of medical insurance abuse and fraud.
5. To evaluate the effectiveness of the existing anti-fraud measures.
6. To provide recommendations on how to improve the insurance system without compromising the employee satisfaction.

Study Questions

Main Research Question

How do medical insurance benefits influence employees' psychological stability and contribute to preventing medical fraud in a pharmaceutical company?

Sub-Questions

1. How do employees perceive the adequacy and accessibility of medical insurance benefits?
2. What is the relationship between medical insurance benefits and employees' psychological stability?
3. What patterns of healthcare utilization exist among employees?
4. What are the common indicators of potential medical insurance misuse or fraud?
5. How effective are the current mechanisms used to detect and prevent medical fraud?
6. What strategies can improve employee satisfaction while minimizing insurance misuse?

Research Hypotheses

1. H1: Medical insurance coverage has a positive and significant impact on the psychological stability of workers.
2. H2: The higher perceived adequacy of medical insurance coverage, the greater is the employee's satisfaction and psychological stability.
3. H3: There is a significant connection between healthcare practices and the probability of medical insurance abuse.
4. H4: Monitoring and fraud detection methods used effectively minimize cases of medical insurance fraud.
5. H5: Workers that are more aware of the policy details are less prone to misuse of their medical insurance.

Theoretical Model

Purpose of the Model

The suggested theoretical model represents a transformation of the research question into a series of measurable interrelations. The model represents health insurance benefits as an organizational offering that can impact two variables, namely the psychological well-being of workers and the efficiency of measures taken to prevent the abuse of medical insurance. This framework also acknowledges that healthcare utilization depends on awareness, medical necessity, and the quality of administrative controls and, therefore, heavy use does not automatically constitute fraud.

The above stated model has been developed with respect to the organizational context studied in this case study. The model is based upon the practical functions of the employer, insurance broker, insurance company, health service providers, and insured employees. All the parties contribute to the success of the insurance system; however, the focus of the questionnaire lies on the perceptions of the employees.

Theoretical Foundations

Job Demands-Resources Theory offers the major justification for why insurance benefits should lead to psychological stability. According to the theory, organizational resources could help workers cope with job demands and prevent negative impacts on their well-being (Bakker & Demerouti, 2017). Medical insurance, in the current research, is perceived as a resource since it lowers financial insecurity, enhances treatment opportunities, and allows workers to address health issues without placing extra strain on their job-related obligations.

Perceived Organizational Support Theory is relevant to the above explanation. It is possible for employees to consider the quality of health insurance provided as an indication of how much the organization cares about their wellbeing. If there is consistent provision and responsiveness in the insurance coverage, the perception of the organization being supportive is likely to be strengthened.

The anti-fraud component makes use of the moral hazard and internal control approaches. Insurance can influence health care utilization in that the insurance beneficiaries do not bear the total costs of the services availed to them. Fraud, however, requires some deception or misrepresentation to constitute it, since higher use may be necessitated by genuine health needs. It is, thus, important to monitor both utilization and the relevant policy guidelines.

Variables and Proposed Relationships

The independent variable under investigation is perceived insurance benefits, which is defined as coverage adequacy, provider accessibility, service availability, efficiency of medical approval process, clarity of terms of the policies, and support experienced by employees when they make inquiries or file complaints.

The first dependent variable is employees' psychological well-being, which in the context of this research means financial security, lowered anxiety concerning health care costs, assurance in access to treatment, emotional stability, and ability to concentrate at work in case of health problems. Psychological well-being is not considered here as a clinical condition of mental disorders.

The second impact is the effectiveness of preventing medical fraud. This can be indicated through policies and procedures such as clear policies, awareness campaigns, claim validation, utilization review, confidential disclosure, and control measures that are meant to prevent misuse of medical services but should not limit access to them.

Health insurance awareness and utilization of health services are among the variables used in the study. Health insurance awareness refers to knowledge regarding the health service benefits, exclusions, necessary approvals, and proper usage of health insurance cards.

This analytical framework suggests that there exists a positive relationship between improved insurance perceptions and psychological stability. The second part of this framework is that improved insurance consciousness is related to appropriate utilization of insurance and reduced risk of misuse. Proportionate and clear monitoring will minimize irregular claims.

Operational Model

Pathway 1: Perceived Medical Insurance Benefits → Financial and Treatment Security → Employees' Psychological Stability.

Pathway 2: Insurance Awareness + Responsible Healthcare Use + Monitoring and Verification → Lower Risk of Medical-Insurance Misuse.

The two pathways are connected through the administration of the insurance program. Improvements in coverage and access may support employee welfare, while communication and verification help preserve the financial sustainability of the program. The proposed model therefore emphasizes balance rather than assuming that either generous benefits or strict controls are sufficient on their own.

The framework is tested through a structured employee questionnaire. The resulting analysis evaluates associations among perceptions and self-reported patterns; it does not confirm individual fraud cases. References to misuse risk in the findings should therefore be understood as indicators derived from the instrument, not legal or investigative conclusions.

Chapter 2: Literature Review

Literature Review

Introduction

The framework put forward by this study is an explanation of how the medical-insurance package affects the psychological well-being of employees and prevents medical insurance fraud among the employees in a pharmaceutical company in Saudi Arabia. Medical insurance is an essential benefit of employment as it ensures that the employees receive healthcare services and are protected against unexpected medical expenses. However, the effectiveness of medical insurance depends on more than just having insurance; there must also be sufficient, accessible, clear, and efficient insurance.

This theoretical framework is largely grounded in the Job Demands-Resources Model, which states that organizational resources can mitigate the negative impact of job demands and enhance employees' psychological well-being (Bakker & Demerouti, 2017). In this particular research, the insurance benefits are seen as an organizational resource that can minimize employees' worries about the cost of health care and access to it.

The framework is also based on fraud prevention and moral hazard theories. Medical insurance can increase access to required health care services; however, medical insurance can create possibilities for abuse when there are no sufficient awareness and verification measures in place. It goes without saying that the efficient management of medical insurance is a balance between adequate benefits and awareness and monitoring measures.

The proposed theoretical framework views insurance benefits as the independent variable. Psychological stability of the employees and the effectiveness of preventing medical fraud constitute the major dependent variables. The

knowledge about insurance benefits, use of health care services, and organizational controls help explain the relationship between independent and dependent variables.

Dependent Variable

The theoretical model includes two main dependent variables: employees' psychological stability and medical fraud prevention effectiveness.

Employees' Psychological Stability

Psychological stability of employees refers to the capacity of individuals to maintain emotional stability, handle stress, and carry out their duties within the organization without any undue anxiety caused by their health issues or medical costs.

The following dimensions of psychological stability will be considered in this research study in terms of the employees' attitudes towards their insurance benefits:

- Finances in regard to their health care costs.
- Lowering of anxiety level in regard to their health care.
- Self-confidence to receive necessary treatment.
- Psychological stability.
- Reducing the concerns about their medical costs.
- Coping with job stress.
- Satisfaction of organizational health care support.
- Trust in the medical insurance program.

Sufficient health insurance coverage is anticipated to improve mental well-being due to lessening of both financial and psychological uncertainties related to sickness and medical care. An employee who feels that his or her insurance plan offers enough coverage would be less anxious since he or she would know that necessary medical assistance will be provided when needed.

The availability of healthcare providers can decrease anxiety as the employee would not have to go through any problems while seeking treatment. In addition, clear insurance terms and quick approval process would eliminate any uncertainty regarding provision of certain medical assistance.

In this case, the psychological well-being of employees can thus be improved as they understand that the organization values their health and wellness. The medical insurance can thus convey the message of organizational support apart from serving its intended purpose.

On the other hand, insufficient benefits can end up having the contrary effect. Inadequate coverage, claim denials, limited healthcare network, or complicated approval process can increase stress and dissatisfaction among employees. The employees can thus become worried about affording medical care or receiving healthcare services.

The proposed relationship can be expressed as follows:

Medical Insurance Benefits → Employees' Psychological Stability

The study therefore assumes that more favorable perceptions of medical insurance benefits are associated with higher levels of employees' psychological stability.

Medical Fraud Prevention Effectiveness

The second dependent variable is the prevention of fraud in healthcare. This variable captures the effectiveness of the organizational measures used in preventing, detecting, and curbing any form of inappropriate or fraudulent use of the health insurance benefits.

Prevention of fraud in healthcare encompasses:

- The ability to detect abnormal usage of healthcare.
- The verification of the claims and services.
- The monitoring of repeat or excessive claims.
- The clarity of the anti-fraud policy.
- The availability of employee awareness program.
- The effectiveness of internal controls procedures.
- The confidential reporting of any suspicious activity.
- The collaboration between the organization, insurance broker, insurance company, and the healthcare service providers.
- The minimization of chances of card abuse.
- The promotion of appropriate healthcare usage

Medical insurance fraud can consist of the submission of false claims, false representation, making duplicate claims, using the insurance card for personal gain, or coordination with others to get unauthorized services. Nonetheless, regular usage of medical services cannot be considered an act of fraud since it could emanate from actual medical requirements, long-term illness, preventative measures, or lack of access to health care prior to getting the insurance cover.

From this perspective, the theoretical model differentiates between proper utilization, improper utilization, and fraud; proper utilization is based on health care requirements. Improper utilization involves unnecessary utilization and over-utilization but is not a matter of deceit. On the other hand, fraud includes behaviors that are deliberately engaged in for accessing illicit benefits.

However, to prevent fraud, there must be some kind of monitoring and control mechanisms that may involve analyzing of the claims, verification, internal controls, and employee reports. These measures can help to reveal any possible fraudulent activity and reduce the loss of the organization (Association of Certified Fraud Examiners, 2022).

It is equally crucial for the employees to have the knowledge of the policy coverage, the exclusions, the approvals and the forbidden activities.

The relationship can be expressed as follows:

Medical Insurance Benefits + Insurance Awareness + Monitoring Mechanisms → Medical Fraud Prevention Effectiveness

This analytical structure assumes that well-designed insurance benefits, when supported by clear policies, employee awareness, and effective monitoring, will contribute to the prevention of medical insurance misuse and fraud.

The model does not take into consideration the possibility that the limitation of access to medical care can serve as a measure aimed at preventing fraud. Extremely tight measures might lead to a delay of treatment and might have a negative impact on the psychological well-being of the employees.

On the whole, the theoretical framework implies that such an insurance-medical package may result in two major organizational effects. Firstly, they can positively influence the psychological stability of employees by providing improved medical services and decreasing their financial worries. Secondly, in combination with some awareness and monitoring mechanisms, they can encourage responsible use of medical services and prevent medical fraud.

Independent Variable: Medical Insurance Benefits

The independent variable in this research is medical insurance benefits. Medical insurance benefits can be defined as the health insurance services that are provided to employees through the organization's health insurance scheme.

Medical insurance benefits will be quantified based on how effective the insurance program is perceived by the employees. The key dimensions under this variable include:

- Adequacy of insurance coverage.
- Accessibility of approved healthcare providers.
- Availability of required medical services.

- Efficiency of claim approval procedures.
- Clarity of insurance policies and conditions.
- Quality of healthcare services provided under the insurance program.
- Coverage of prescribed medications, examinations, and hospital treatment.
- Employees' understanding of covered and excluded services.

In the Job Demands-Resources theory, the availability of organizational resources plays a significant role in helping individuals deal with various pressures associated with job and life (Bakker & Demerouti, 2017). Medical insurance can be treated as one of such organizational resources because it minimizes the cost of healthcare and increases employees' self-confidence regarding receiving medical services.

If the employees feel that their insurance cover is sufficient and easy to access, they will have more financial stability and less worry about any costs associated with healthcare. Effective approval process and policy provisions can also build confidence in the organization among the employees.

On the other hand, low coverage, small provider networks, ambiguity regarding exclusion, late approval, and claims rejection may result in uncertainty and dissatisfaction among employees. This might have a negative effect on the psychological well-being and organizational support perception of employees.

Health service utilization could also be affected by medical insurance benefits. Medical insurance ensures that an individual can access any treatment required without having to meet the whole payment. However, inadequate knowledge on the insurance terms and/or the employees themselves could lead to inappropriate utilization

Summary of Past Studies

Earlier studies have been categorized into four categories: organizational resources and employee welfare; perceived value of employee benefits; utilization of health insurance and financial security; and fraud detection and internal control. The studies reviewed below offer empirical support for the four categories; however, they do not usually address all four categories in one pharmaceutical company of Saudi Arabia at the same time.

According to Bakker & Demerouti (2017), Rhoades & Eisenberger (2002), and Kurtessis et al. (2017), there is a relationship between organizational resources, perceived support, employee well-being, and positive organization attitude. The contribution of Hong et al. (2024) to this body of knowledge lies in the fact that the perception of benefit may matter more than the actual benefit available.

The research on health insurance suggests that insurance has the potential to influence access and the behavior associated with healthcare utilization; the impact of insurance on psychology depends upon affordability, access, and the needs of the individuals. According to Al-Hanawi et al.'s studies in Saudi Arabia, it is important to consider the factors of choice, waiting period, and access.

The studies on fraud have concentrated more on the monitoring systems, claim analysis, and detection techniques. As explained by ACFE (2022), Joudaki et al. (2015), Rashidian et al. (2012), and Nabrawi and Alanazi (2023), there is no doubt about the importance of awareness, internal controls, and data analysis. However, the suspicious patterns must always be verified by professionals.

Contribution of the Current Study

The present study adds Saudi organizational data in the context of a pharmaceutical firm, employs an integrative model, utilizes individual level data to link insurance processing with psychosocial and behavioral consequences, and separates frequent use from outright fraud. All of the cases of misuse are treated as perceptions rather than proved cases.

Theoretical Framework of the Study

Analysis of the present study will provide an understanding of the relation between insurance benefits, psychological well-being of employees, and efficiency of medical fraud control in the pharmaceutical company operating in Saudi Arabia. The research model is built on the hypothesis that medical insurance is more than just a contract for payment of healthcare costs.

Rather, it stands as an organizational asset, which will probably have an effect on the perception of security, support, trust, and protection among its employees. On the other hand, the existence of insurance cover might impact healthcare utilization behavior, hence the need for policy guidelines, employee awareness, claim validation, and monitoring measures.

Employees within pharmaceutical firms face a situation where there is heavy regulation of their work environment, high workload, high quality demands, responsibility, and compliance with health and safety guidelines. Employees could also be facing some personal issues that include the threat of sickness, the cost of

treatment, availability of healthcare facilities, and financial implications associated with sudden sickness. If these issues combine with workplace-related stress, they would result in greater stress and reduce employees' concentration on their professional duties.

Medical insurance can ease off the above concerns through the provision of easy access to medical care as well as protection of the employees from substantial and/or unforeseen medical costs. However, the psychological benefit provided by the insurance will be determined by the perception of the employees on the availability of these services. Employees can continue feeling anxious even when there are insurance coverings due to various reasons such as a restricted provider network, lengthy approval processes, ambiguous policy conditions, or exclusion of necessary services. Thus, the proposed theoretical framework concentrates on the employee perceptions about the quality of insurance coverages.

The suggested model is mostly justified by the Job Demands-Resources Theory. In this framework, job demands can be understood as employment features which imply constant physical, mental, or emotional effort, while job resources can be defined as work features that assist employees in reaching their goals and mitigate the impact of job demands on them and help them develop psychologically and professionally. Organizational resources may thus shield employees from exhaustion and contribute to their well-being, motivation, and engagement (Bakker & Demerouti, 2017).

In this case study, the concept of health insurance benefits is perceived as an organizational resource. Sufficient health insurance will allow decreasing the fears of employees regarding healthcare costs, increase access to care and assure the availability of healthcare assistance whenever necessary. Insufficient health insurance may act oppositely. Delay in approval, rejection of claims, lack of access to the provider, confusion in exclusions or limited coverage amount may be seen as additional demands since employees spend time, emotions and money on accessing healthcare services.

This model has a direct application in this scenario, since the psychological impact of insurance is going to be determined by the balance between job demands and the presence of organizational resources to deal with these demands. High job demands employees could benefit more from having healthcare insurance as one less source of stress for them. Employees who have to deal with high job demands and uncertain medical insurance are going to have increased pressure from both their job and medical needs.

The suggested framework also makes use of Organizational Support Theory. According to this theory, employees hold general perceptions or beliefs about how much the organization appreciates their contribution and how much it cares for them. Such perceptions are known as perceived organizational support. Good employment relations, organizational reward, fair treatment, and human resource management may influence employee perceptions about organizational care (Rhoades & Eisenberger, 2002).

A comprehensive meta-analysis of Organizational Support Theory was carried out by Kurtessis et al. (2017), which used the data collected from 558 sources. The results of the research proved links between the practices of the organization and the employees' perceptions of the organizational support, as well as links between this perception and well-being, performance, and favorable attitudes to the organization.

Thus, medical insurance can also be perceived as a signal of organizational concern for employees. In case the medical insurance offered is comprehensive, well communicated, and effectively managed, employees will feel that their organization is really concerned about them, as well as their health and family needs. In this way, trust and emotional security of the employees will be enhanced. However, in case the medical insurance program is fraught with problems, employees will perceive these issues as signals of insufficient concern for the welfare of employees.

Current information on employee benefits confirms this interpretation. In a meta-analysis of 134 studies and more than 260,000 participants, Hong, Ford, and Jong

(2024) show that employee benefits as well as their subjective perception have been linked to organizational support, job satisfaction, organizational commitment, withdrawal intentions, and overall wellbeing. Additionally, it has been shown that the employees' perception of benefit quality is more important than the actual use of the benefit. This result is directly applicable to the current study since the perceptions of adequate coverage, access to services, clear policies, and effective administration become more important than the presence of medical insurance.

Organizational support has also been identified as a factor that could influence the well-being of workers within healthcare organizations. According to Ogbonnaya, Tillman, and Gonzalez (2018), analysis was done on the performance of 66,930 workers operating in 162 different healthcare organizations. The findings showed that there was a relationship between supportive organizational practices and the well-being of employees, intention to stay, and patient satisfaction. Despite the study not focusing on medical insurance but rather teamwork and training, it proves the general idea.

Further longitudinal evidence has been offered by Weziak-Bialowolska et al. (2023), who explored the psychological climate of care at a workplace based on survey data, personnel data, and health insurance claims. Higher levels of a caring workplace climate were linked with better well-being, mental and physical health, financial security, distraction, and work engagement. Additionally, a caring workplace was linked to decreased likelihood of developing depression but not of developing anxiety. Overall, these studies suggest that organizational concern about employees' health may contribute to psychological well-being and work performance.

Furthermore, the link between health insurance and mental wellbeing can be understood in terms of financial security. There is a possibility that expenses associated with health care can generate feelings of uncertainty, stress, and financial burden, especially when there is uncertainty concerning the availability of certain medical procedures within the health insurance program.

Wells et al. (1989) analyzed the data from the RAND Health Insurance Experiment to test the hypothesis that the generosity of the insurance plan influenced the psychological distress of individuals and their psychological well-being. While this analysis failed to prove the hypothesis of the psychological benefit of free care over cost-sharing insurance, where the catastrophic cover was provided, it showed the complexity of the connection between insurance and psychological well-being, which varies depending on income level, state of health and design of insurance. This finding highlights the necessity of studying perceived adequacy of benefits rather than making assumptions about uniform effects of generous insurance on all employees.

Burns and Wolfe (2016) examined the impact of insuring young adults on their mental wellbeing. According to this study, there may be various ways by which insurance expansion can influence the mental wellbeing of people; some of these include better financial security, greater access to mental health care services, and decreased stress over medical expenses. One measure of emotional wellbeing showed a small but positive relative change in people eligible for insurance expansion.

Recent studies have also shown that insurance cost is associated with mental stress. According to Mukhopadhyay (2026), when premiums were subsidized, the effect on people who had health insurance was decreased psychological distress among private individuals. Although the environment used in the study is different from the case in Saudi Arabia, the study does provide evidence for the proposed method through which lowering financial burden improves psychological stability.

The Saudi environment further justifies research into insurance benefits as an organizational resource. Employers in the private sector in Saudi Arabia have an important part to play in offering insurance coverage for health care to their employees and their qualifying dependents. Consequently, employee access to private health care may well be dependent on such a benefit plan.

According to Al-Hanawi et al. (2018), people who had private insurance were able to acknowledge the benefits of having access to private health care services, yet some of them were not satisfied with the lack of choice of providers, waiting periods, inequality in health care provision for insured and uninsured patients, and poor availability of such services in non-urban settings. This shows that having insurance does not mean that people will be provided with high-quality and easily accessible health care services.

The second path of theory relates to the connection between health insurance, use of health care services, and the prevention of fraud. The use of health insurance decreases the price paid directly by employees for their health care services. In economics, the described reaction is called moral hazard. The moral hazard does not imply fraud; rather, it implies changes in use of health care services because of the fact that individuals who have insurance do not pay the full price for these services.

In Einav and Finkelstein (2018), a review of experimental and quasi-experimental literature was conducted to determine that people generally use fewer health services when their own share is higher. This article confirms that there is insurance-induced behavioral reaction, but at the same time, shows that additional use of services does not always mean wastefulness or fraud. It can simply represent needed care that one did not seek because of expenses.

This distinction is fundamental in the current theory. A worker who makes more use of healthcare services once he or she gets proper insurance coverage could be acting in a normal way to address a medical need that had not been met before. One worker may also use the services too much due to a lower direct cost of the service, without any intention to lie to the insurance company. A third person may also intentionally falsify information and use his/her insurance card fraudulently.

The proposal itself recognizes that health-service use, insurance awareness, psychological stability, and monitoring mechanisms should be integrated rather than examined in isolation. The research gap arises because employee welfare and fraud

prevention are often treated as separate areas, especially within the Saudi pharmaceutical context.

The theoretical model therefore includes one principal independent variable and two principal dependent outcomes:

Independent Variable: Medical Insurance Benefits

First Dependent Variable: Employees' Psychological Stability

Second Dependent Variable: Medical Fraud Prevention Effectiveness

Healthcare-utilization patterns, insurance awareness, and monitoring mechanisms provide supporting behavioral and administrative explanations for the relationships between the principal variables. They are not used to accuse employees of fraud; instead, they help explain how medical insurance can be managed responsibly while protecting legitimate access to healthcare.

The proposed relationships may be summarized as follows:

Medical Insurance Benefits → Employees' Psychological Stability

Medical Insurance Benefits, supported by Insurance Awareness and Monitoring
→ Medical Fraud Prevention Effectiveness

Model assumptions include the fact that good insurance benefits could improve psychological stability through reducing financial insecurity and boosting treatment confidence. There is also the assumption that health insurance schemes are less likely to lead to abuse if benefits are well-covered by policies, employee knowledge, claims validation, and appropriate monitoring.

Dependent Variable

The dependent variable represents the outcome that is expected to change in response to the independent variable. In this study, the theoretical model includes two related dependent outcomes: employees' psychological stability and medical fraud prevention effectiveness. These outcomes represent two different dimensions of an effective organizational company insurance programme.

The first outcome focuses on employee welfare. It examines whether insurance benefits provide emotional reassurance, financial security, and confidence in accessing treatment. The second outcome focuses on insurance governance. It examines whether the medical insurance system contains effective policies and mechanisms that promote responsible utilization and reduce opportunities for fraud.

These two outcomes should be analyzed separately because an insurance program may perform well in one area and poorly in another. A highly restrictive program may help to reduce the number of claims but create anxiety and dissatisfaction among employees. A very generous program may provide strong psychological reassurance but become vulnerable to inefficient utilization when awareness and control systems are weak. The effectiveness of the program therefore depends on achieving an appropriate balance between welfare and control.

Employees' Psychological Stability

Employees' psychological stability is used here to describe their ability to maintain emotional balance, experience a reasonable sense of security, manage healthcare-related concerns, and continue performing their occupational responsibilities without excessive anxiety arising from medical needs or healthcare expenses.

Psychological stability in the current study does not represent the clinical diagnosis of a mental disorder. It is an organizational and psychological condition reflected in employees' feelings of financial security, emotional reassurance, confidence in obtaining treatment, reduced healthcare-related anxiety, and ability to cope with work pressure.

The employee questionnaire developed for the study operationalizes psychological stability through feelings of financial security, reduction of healthcare-related anxiety, emotional stability, confidence in obtaining medical treatment, and ability to cope with work-related stress.

The first dimension is financial security. Employees may experience psychological pressure when they believe that illness could create unaffordable expenses. This pressure can exist even when an employee is currently healthy because the risk of future medical costs remains uncertain. Medical insurance can reduce this uncertainty by covering part or all of the expected cost of consultations, medication, diagnostic examinations, hospitalization, and other services.

Financial security does not require the insurance program to cover every available treatment without limits. Rather, employees should perceive that the coverage is sufficient for their realistic healthcare needs and that unexpected illness will not create severe financial consequences. When employees understand their benefits and believe that important services are covered, the insurance program may help to reduce anticipatory anxiety.

Evidence regarding medical financial hardship shows why this dimension is important. Financial difficulty associated with healthcare has been linked to greater psychological burden, lower life satisfaction, and serious psychological distress. The relationship between financial pressure and psychological well-being supports the inclusion of healthcare-related financial security as a central dimension of psychological stability.

The second dimension is reduced healthcare-related anxiety. Employees may worry about whether an insurer will approve a medical procedure, whether the nearest hospital belongs to the approved network, whether a prescribed medication is covered, or whether they can afford a service that is excluded from the policy. Persistent uncertainty regarding these matters may create anxiety even before treatment is required.

Clear policy information can reduce this anxiety. Employees should know the benefits available to them, the services requiring prior approval, the limits of coverage, and the procedures to follow when a claim is rejected. When communication is unclear, employees may feel that access to healthcare depends on unpredictable administrative decisions.

The third dimension is confidence in obtaining necessary treatment. Medical insurance contributes to psychological stability when employees believe that they can receive appropriate healthcare in a timely manner. Confidence depends on more than financial reimbursement. It also depends on the accessibility of hospitals, clinics, pharmacies, specialists, diagnostic services, and emergency care.

An insurance program with an extensive provider network may heighten treatment confidence. By comparison, employees may remain insecure when approved providers are geographically distant, appointments are difficult to obtain, or specialist services are unavailable. Saudi evidence concerning restricted provider choices and unequal access illustrates why practical accessibility should be included in the evaluation of insurance benefits.

The fourth dimension is emotional stability. Employees who feel protected against healthcare risks is potentially less likely to experience persistent worry, frustration, or emotional disturbance related to medical expenses. This does not imply that insurance can eliminate all sources of psychological pressure. Occupational workload, family responsibilities, existing medical conditions, and

personal circumstances may continue to affect emotional well-being. Still, reliable insurance may remove or reduce one important source of uncertainty.

The fifth dimension is the ability to cope with work-related stress. Job stress and healthcare anxiety may interact. An employee facing intensive work pressure may have fewer psychological resources available to manage uncertainty about medical treatment. Conversely, an employee who is confident about healthcare access can be better positioned to focus on work responsibilities.

The Job Demands–Resources Theory suggests that organizational resources can reduce the negative effects of demanding work conditions. Medical insurance may not directly reduce workload, role conflict, or regulatory pressure, but it may protect employees from an additional demand associated with healthcare insecurity. In this sense, medical insurance serves as a supportive resource that contributes to the employee’s overall capacity to cope.

Psychological distress is common across different occupational groups, and many employees experiencing significant distress do not obtain treatment. Research involving large employee samples has shown that psychological distress is associated with occupational risk factors and may remain untreated among a considerable proportion of affected workers. This emphasizes the importance of organizational resources that facilitate access to care and reduce barriers to treatment.

The relationship between insurance and psychological stability is not expected to be identical for all employees. It may differ according to age, income, family size, chronic health conditions, previous healthcare experiences, and duration of participation in the insurance program. Employees with dependants or chronic medical needs may evaluate insurance adequacy differently from employees who rarely use healthcare services.

For this reason, the theoretical model is based on perceived the medical-insurance package rather than the technical characteristics of the insurance policy alone. Two employees covered under the same policy may report different levels of psychological stability because they have different healthcare needs, experiences, and expectations.

The framework proposes that employees who perceive their insurance as adequate, accessible, clear, and efficient will report higher psychological stability. Employees who perceive their coverage as inadequate, difficult to access, or inconsistently administered are expected to report lower psychological stability.

This relationship is expressed in the first research hypothesis:

H1: Medical insurance benefits have a positive and significant effect on employees' psychological stability.

The proposed model also supports the proposition that perceived coverage adequacy is related to employee satisfaction and psychological stability. That said, because the questionnaire does not treat employee satisfaction as a completely separate construct, satisfaction should be interpreted as part of the employee's general evaluation of the insurance program rather than as an additional dependent variable.

Medical Fraud Prevention Effectiveness

The second dependent outcome is medical fraud prevention effectiveness. It is used here to describe the perceived ability of the organization, insurance broker, insurer, and associated healthcare providers to discourage, identify, investigate, and reduce intentional misuse of insurance benefits.

The survey instrument measures this outcome through the clarity of anti-fraud policies, employee-awareness programs, healthcare-utilization monitoring,

verification of claims and medical services, confidential reporting procedures, and the effectiveness of organizational controls.

Medical insurance fraud should be defined carefully. It involves intentional deception or misrepresentation designed to obtain benefits that are not legally or contractually authorized. Fraud is therefore different from error, misunderstanding, negligence, high utilization, or administrative disagreement.

Villegas-Ortega, Bellido-Boza, and Mauricio (2021) reviewed 67 studies and identified numerous manifestations and contributing factors associated with health insurance fraud. Their review reported that fraud can be committed by healthcare providers, insured beneficiaries, and insurance organizations. Examples included phantom billing, falsified documents, identity misuse, misrepresentation of coverage, and unnecessary utilization; the diversity of these practices demonstrates that fraud prevention cannot focus exclusively on employee behavior.

The first dimension of fraud prevention effectiveness is policy clarity. Employees should understand which behaviors are permitted, which behaviors represent misuse, and which practices may have legal or disciplinary consequences. Unclear rules can result in unintentional errors and may make deliberate misuse easier to justify.

Policy clarity should include guidance regarding the use of insurance cards, dependent eligibility, provider-network requirements, prior approvals, covered services, excluded services, medication limits, and the prohibition of sharing insurance credentials. Employees should also understand that allowing another person to use an insurance card or intentionally providing false information may constitute fraud.

The second dimension is employee awareness. Awareness programs can reduce unintentional misuse by helping employees understand the correct way to access

healthcare services. Awareness may also influence intentional behavior by increasing the perceived likelihood that irregular activities will be identified.

The analysis's questionnaire examines employees' understanding of insurance terms and conditions, covered and non-covered services, responsible healthcare use, utilization frequency, and knowledge of behaviors that may represent misuse.

Awareness should not be limited to a policy document distributed at the beginning of employment; insurance rules is potentially difficult to understand, and employees may not remember information that is not immediately relevant. Effective awareness may require orientation sessions, concise employee guides, digital communication, frequently asked questions, periodic reminders, and accessible support channels.

The third dimension is claims and utilization monitoring. Monitoring involves reviewing claims patterns to identify unusual frequencies, repeated services, duplicate claims, inconsistent treatment patterns, or services that may not correspond with expected medical needs.

Monitoring should be interpreted as a screening process rather than a final determination of fraud. An unusual claim represents an indicator requiring examination, not evidence of wrongdoing. A legitimate chronic condition, pregnancy, major surgery, rehabilitation need, or complex diagnosis may produce high utilization. For that reason, claims data should be reviewed in combination with clinical information and policy conditions.

Joudaki et al. (2015) reviewed the use of data-mining techniques in healthcare fraud and abuse detection. They concluded that automated analysis can assist insurance organizations examine large volumes of claims and identify smaller groups of claims for further investigation. Even so, they also emphasized the need to connect analytical findings with evidence-based healthcare and insurance policy rather than depending exclusively on algorithms.

Rashidian, Joudaki, and Vian (2012) classified anti-fraud interventions into prevention, detection, and response. Their systematic review found limited strong evidence regarding the effectiveness of anti-fraud interventions and highlighted the need for more rigorous evaluations. That outcome is important because the presence of a control mechanism does not automatically establish its effectiveness. Organizations should examine whether controls detect meaningful irregularities, reduce losses, protect legitimate beneficiaries, and operate without creating excessive administrative burdens.

The fourth dimension is technological detection; modern insurance systems can use rule-based methods, statistical analysis, machine learning, and anomaly detection to examine claims. These systems may identify patterns that are difficult to detect through manual review.

Nabrawi and Alanazi (2023) developed machine-learning models using claims information from healthcare providers in Saudi Arabia. Their findings demonstrated the potential of random forest, logistic regression, and artificial neural networks for identifying fraud-related patterns. The case study is directly applicable because it provides evidence from the Saudi insurance environment. Yet predictive models should support professional investigation rather than replace it, especially when classifications may affect employees' access to healthcare or reputation.

Du Preez et al. (2025) systematically reviewed 137 studies using machine-learning methods for healthcare claims fraud detection. They identified supervised, unsupervised, and hybrid approaches but also reported major challenges, including inconsistent data, privacy concerns, limited data standardization, and a shortage of confirmed fraud cases for training models. These limitations reinforce the need for careful human review and transparent decision-making.

The fifth dimension is confidential reporting. Employees, administrators, healthcare providers, and insurance personnel may observe suspicious conduct that

is not visible in claims data. A confidential reporting mechanism allows concerns to be communicated without exposing the reporter to unnecessary risk.

The Association of Certified Fraud Examiners identified reporting mechanisms, internal controls, awareness, and continuous monitoring as important components of organizational fraud detection. Even so, its findings covered occupational fraud across many sectors rather than healthcare insurance alone. This case study therefore applies these general governance principles to the medical insurance context.

The sixth dimension is the balance between fraud control and legitimate access; effective fraud prevention should not create fear among employees who need healthcare. If employees believe that frequent use will automatically expose them to accusations, they may delay necessary treatment. This could negatively affect physical health, psychological stability, absenteeism, and work performance.

Controls should therefore be risk-based and proportionate. High-risk patterns may receive further review, while ordinary claims should be processed efficiently. Employees should also have an opportunity to clarify unusual patterns and appeal incorrect decisions.

The dependent variable should be interpreted as perceived fraud prevention effectiveness, not the actual number of fraud incidents. The analysis relies on a questionnaire completed by employees rather than confirmed investigation records, court decisions, or complete claims data. The evidence from the 247 cases can therefore show whether employees believe policies, awareness, monitoring, verification, reporting, and controls are effective. They cannot establish that a particular employee committed fraud.

This methodological distinction is consistent with the study instrument, which explicitly avoids requiring participants to admit direct involvement in fraudulent conduct.

Independent Variable

The independent variable in the theoretical model is insurance benefits. Medical insurance benefits refer to the healthcare coverage, services, financial protection, and administrative support provided to employees through the organization's insurance program.

The independent variable is measured through employees' perceptions of coverage adequacy, accessibility of healthcare providers, availability of medical services, efficiency of claim approval procedures, clarity of insurance policies, and the quality of services delivered through the insurance program.

The first dimension is coverage adequacy. Coverage adequacy denotes the extent to which the insurance program meets employees' reasonable healthcare needs. It may include consultations, diagnostic services, medication, hospitalization, emergency care, maternity services, dental care, optical services, mental healthcare, chronic disease management, and specialist treatment, depending on the policy.

Employees evaluate adequacy according to their personal and family needs. A benefit limit that appears sufficient to one employee may appear inadequate to another employee with a chronic condition or several dependants. It follows that adequacy is a perceived assessment rather than a purely technical value.

Coverage adequacy is expected to influence psychological stability because employees who believe that important healthcare needs are protected may feel less

concerned about future costs. It may also influence utilization because broader coverage reduces the immediate financial price of obtaining services.

The second dimension is provider accessibility. Accessibility concerns whether employees can reach and use approved hospitals, clinics, pharmacies, laboratories, and specialists. It includes geographical distance, appointment availability, waiting times, operating hours, provider capacity, and the availability of healthcare services in different regions.

A long list of approved providers does not necessarily guarantee meaningful access. Some providers is potentially located far from employees, may not offer required specialties, or may apply different appointment procedures to insured patients. Accessibility should therefore be evaluated from the employee's practical experience.

Saudi research has demonstrated that insurance can affect health-seeking behavior and encourage the use of medical check-ups. This supports the assumption that access and coverage influence whether individuals seek care.

The third dimension is service availability. Employees may have access to a provider but still be unable to obtain a required service. For example, a hospital is potentially long to the approved network while a particular specialist, medication, diagnostic examination, or treatment remains unavailable or excluded.

Service availability contributes to treatment confidence; employees who believe that necessary services will be available when required may report greater psychological reassurance. Limited availability can produce frustration and may encourage employees to seek repeated consultations at different providers.

The fourth dimension is claim and approval efficiency. Many medical services require approval from an insurer or third-party administrator. Employees may

evaluate the insurance program according to the speed, consistency, fairness, and transparency of these decisions.

Approval delays can increase anxiety, particularly when the employee is waiting for an important procedure or medication. Repeated requests for documentation may also create frustration and reduce trust in the program. Efficient approvals may improve psychological stability by reducing uncertainty and enabling timely treatment.

Even so, approval controls also contribute to fraud prevention. Verification can identify services that are excluded, duplicated, medically inconsistent, or incorrectly documented. Approval systems therefore perform both a welfare function and a control function. They should protect the insurance program without causing unnecessary delays in legitimate treatment.

The fifth dimension is policy clarity. Employees should understand the meaning of coverage limits, exclusions, co-payments, deductibles, provider networks, approval requirements, and claim procedures. A technically comprehensive policy may produce little psychological reassurance when its terms are difficult to understand.

Clarity also supports responsible utilization. Employees who understand the policy are less likely to request excluded services unintentionally or misunderstand a legitimate rejection. Clear communication could lessen conflict among employees, employers, insurers, brokers, and healthcare providers.

The sixth dimension is service quality. Service quality includes the responsiveness of insurance representatives, treatment by healthcare providers, accuracy of information, complaint handling, claims support, and the general experience of using the insurance program.

Employees may evaluate the organization's commitment to their welfare through these interactions. Even when the policy contains adequate financial limits, poor administrative treatment may help to reduce perceived support. This argument is consistent with the finding that subjective benefit evaluation can be more strongly related to employee outcomes than benefit use alone.

The seventh dimension is financial protection. Insurance should reduce employees' direct exposure to major medical expenses. Financial protection might be influenced by coverage limits, co-payments, excluded services, reimbursement procedures, and the proportion of treatment costs paid by the insurer.

Financial protection connects the independent variable directly to psychological stability. When employees believe that a serious illness would create major personal debt, they may continue to experience insecurity despite having formal insurance. Conversely, reliable protection can reduce anticipatory worry.

The eighth dimension is benefit communication and awareness. Although awareness is treated as a supporting variable in the broader model, it is closely connected to the effectiveness of the independent variable. Employees cannot evaluate or use medical insurance effectively when they do not understand the available benefits.

Communication should explain both rights and responsibilities. Employees need information about how to obtain care, but they also need guidance concerning prohibited conduct and responsible utilization. Effective communication therefore contributes to both psychological reassurance and fraud prevention.

The proposed framework does not assume that more coverage automatically leads to less fraud. Generous coverage may improve well-being but also increase utilization because the employee bears a smaller share of the service cost. Einav and Finkelstein's review of moral hazard demonstrates that healthcare consumption

responds to out-of-pocket prices. Even so, increased utilization may include both necessary and unnecessary care, and the two should not be treated as equivalent.

Accordingly, the independent variable affects the two dependent outcomes through different mechanisms.

Medical insurance benefits influence psychological stability through:

- Reduced exposure to healthcare expenses.
- Improved confidence in obtaining treatment.
- Increased perceived organizational support.
- Reduced uncertainty regarding medical services.
- Greater trust in the insurance and organizational systems.
- Improved ability to cope with healthcare-related and occupational stress.

Medical insurance benefits influence fraud prevention through:

- Clear definition of covered and excluded services.
- Transparent utilization procedures.
- Employee awareness of rights and responsibilities.
- Verification of claims and approvals.
- Monitoring of unusual healthcare-utilization patterns.
- Confidential reporting and investigation mechanisms.
- Coordination among the employer, broker, insurer, and healthcare providers.

The final theoretical assumption is that the best insurance program is not necessarily the program with the lowest claims expenditure. Low expenditure may result from healthy employees, efficient prevention, or appropriate control, but it may also result from inaccessible services, delayed approvals, or employees avoiding treatment.

Similarly, a high claims level is not necessarily proof of fraud. It may reflect chronic illness, expanded access, preventive care, an older employee population, family coverage, or temporary medical events. Fraud prevention should therefore be based on verified evidence and patterns of intentional deception rather than on utilization volume alone.

The integrated theoretical model proposes that insurance benefits can simultaneously produce psychological and behavioral outcomes. Adequate, accessible, clearly communicated, and efficiently administered benefits are expected to enhance psychological stability. When these benefits are combined with employee awareness, claims verification, monitoring, and transparent controls, they are also expected to improve medical fraud prevention effectiveness.

Chapter 3: Research Methodology

Introduction

This section explains the methodological approach adopted to examine the impact of insurance benefits on employees' psychological stability and the effectiveness of medical fraud prevention within a pharmaceutical company in Saudi Arabia. The methodology was selected according to the study objectives, research questions, hypotheses, and the nature of the variables being investigated.

The research relies on quantitative data collected directly from employees enrolled in the company's health-insurance programme. A structured questionnaire was applied to measure employees' perceptions of health-insurance benefits, psychological stability, use of healthcare services, insurance awareness, and fraud-prevention procedures. The survey instrument used a five-point Likert scale ranging from strongly disagree to strongly agree.

The quantitative approach allows the researcher to convert respondents' perceptions into numerical data that can be analyzed statistically. It also enables the study to describe the level of each variable and test the proposed relationships between insurance benefits, employees' psychological stability, and medical fraud prevention.

A total of 263 questionnaire submissions were received. Following consent and eligibility screening, 247 eligible and consenting responses were retained for the final statistical analysis. Participation was voluntary, and all information was treated confidentially and used exclusively for academic purposes.

Research Design

The analysis adopted a quantitative, cross-sectional, descriptive-correlational research design. This design was viewed appropriate because the study examines measure employees' perceptions and examine the statistical relationships among the

research variables without manipulating the organizational employer medical-insurance scheme.

The quantitative design was used because the study investigates measurable variables and tests predetermined research hypotheses. The employee questionnaire responses were converted into numerical values to allow the use of descriptive and inferential statistical techniques.

The case study is cross-sectional because the data were collected from employees during one specific period. It follows that the findings represent employees' perceptions and experiences with the employer medical-insurance scheme at the time of data collection.

The descriptive component was employed to describe the characteristics of the respondents and determine their levels of agreement concerning insurance benefits, psychological stability, health-service use, insurance awareness, and anti-fraud controls. Frequencies and percentages can be used to describe demographic variables, while means and standard deviations can be used to summarize the questionnaire dimensions.

The correlational component was employed to examine the strength and direction of the relationships between the variables. In particular, the study examines the relationship between the medical-insurance package and employees' psychological stability, the relationship between healthcare-utilization patterns and potential insurance misuse, and the relationship between monitoring mechanisms and fraud-prevention effectiveness.

The analysis also follows a case-study design because it focuses on employees of one pharmaceutical company in Saudi Arabia. This design allows the researcher to investigate health-insurance benefits and fraud-prevention practices within their actual organizational context.

The research is non-experimental because the researcher did not change employees' insurance coverage or assign participants to experimental groups. The existing health-insurance programme was examined through employees' perceptions and experiences.

The individual employee represents the unit of analysis. Each questionnaire reflects one employee's evaluation of the health-insurance programme, psychological stability, insurance awareness, patterns of medical-service use, and fraud-control arrangements.

Population of the Study

The population of the study consisted of all employees of the selected pharmaceutical company in Saudi Arabia who were enrolled in the company's employer medical-insurance scheme during the data-collection period.

These employees represented the appropriate study population because they had direct experience with the insurance benefits and procedures being investigated. They were able to evaluate the adequacy of coverage, accessibility of healthcare providers, availability of medical services, efficiency of claim approvals, clarity of insurance policies, and the quality of services provided under the insurance program. These dimensions are consistent with the the medical-insurance package section of the questionnaire.

The population included insured employees from different departments, professional levels, age groups, educational backgrounds, and levels of work experience. Including employees with different characteristics helped provide a broader understanding of how the employer medical-insurance scheme was perceived across the organization.

The research received 263 questionnaire submissions. Four respondents did not provide consent and twelve did not satisfy the eligibility requirement. The final analytical sample therefore consisted of 247 eligible and consenting employees.

Participants were eligible for inclusion when they were employed by the selected pharmaceutical company, enrolled in its company insurance programme, voluntarily agreed to participate, and submitted a sufficiently complete questionnaire.

Employees who were not enrolled in the employer medical-insurance scheme were excluded because they did not have sufficient direct experience to assess the study variables. Substantially incomplete or duplicated responses were also excluded from the final analysis.

The final analytical sample of 247 eligible and consenting responses was applied to describe employees' perceptions and test the study hypotheses. The demographic information collected from these respondents included gender, age group, educational qualification, department, years of work experience, and duration of enrollment in the employer medical-insurance scheme.

Sample Characteristics

The research sample consisted of 247 eligible and consenting employees from the selected pharmaceutical company in Saudi Arabia. Every respondent included in the final analysis was enrolled in the company's employer medical-insurance scheme and had sufficient experience with the program to evaluate its coverage, accessibility, administrative procedures, and healthcare services.

The individual employee represented the unit of analysis. Each response reflected one employee's perceptions of insurance benefits, psychological stability, patterns of medical-service use, insurance awareness, and the effectiveness of medical fraud-control arrangements.

The sample included employees with different demographic, educational, and professional backgrounds. The demographic section of the questionnaire collected information relating to:

- Gender.
- Age group.
- Educational qualification.
- Department.
- Years of work experience.
- Duration of enrollment in the medical insurance program.

These characteristics were included to provide a clear description of the respondents and determine whether the study sample represented employees from different groups and levels within the organization.

The inclusion of employees from different departments was important because perceptions of medical insurance may differ according to employees' work conditions, healthcare needs, family responsibilities, and previous experience with the insurance program. For example, employees who had been enrolled in the insurance program for a longer period may have had more experience with medical approvals, provider networks, claims procedures, and covered services than recently enrolled employees.

Similarly, employees with longer professional experience may evaluate organizational benefits differently from employees at earlier stages of their careers. Age, educational background, and department may also influence employees' awareness of insurance policies and their ability to understand coverage conditions, exclusions, approval requirements, and fraud-prevention procedures.

The demographic characteristics were analyzed using frequencies and percentages. This provided a general profile of the 247 eligible respondents without

revealing their identities. The evidence from the 247 cases chapter presents the number and percentage of participants in each demographic category.

The analysis did not collect names, employee identification numbers, medical record numbers, or other direct personal identifiers. This helped maintain respondents' anonymity and reduced concerns that their responses could affect their employment, insurance benefits, or relationship with the organization.

The sample characteristics should therefore be interpreted as a general description of the participating employees rather than as information identifying any individual respondent.

Sample Size Determination

The case study received 263 questionnaire submissions. After excluding four responses without informed consent and twelve responses that did not satisfy the eligibility requirements, the final analytical sample consisted of 247 eligible and consenting responses.

The target population consisted of employees of the selected pharmaceutical company who were enrolled in its health-insurance programme. Even so, the total number of eligible insured employees was not stated in the original research proposal. It follows that the study should not claim that the sample size was calculated as a specific percentage of the total population unless an official employee population figure is subsequently obtained from the organization.

The achieved sample size was determined through the number of eligible and accessible employees who participated during the specified data-collection period. Participation was voluntary, and only valid and usable questionnaires were retained.

Before including the responses in the final dataset, the collected questionnaires were reviewed according to the following criteria:

- The respondent was an employee of the selected pharmaceutical company.
- The respondent was enrolled in the medical insurance program.
- The questionnaire was substantially complete.
- The response was submitted voluntarily.
- The questionnaire was not duplicated.
- The response contained sufficient data for statistical analysis.

After applying the consent and eligibility criteria, 247 responses were accepted as the final analytical sample.

The sample size was viewed appropriate for the quantitative procedures planned in the study, including descriptive statistics, reliability analysis, correlation analysis, and regression analysis. The number of responses also allowed the researcher to examine the main relationships among insurance benefits, psychological stability, health-service use, insurance awareness, and anti-fraud controls.

Yet sample adequacy should not be evaluated according to the number of responses alone. It also depends on the quality of the data, the number of variables entered into the statistical models, the distribution of responses, and whether the assumptions of the statistical tests are satisfied.

The researcher should therefore examine missing values, response patterns, normality, outliers, and other data-quality indicators before conducting the final hypothesis tests.

For methodological accuracy, the study should maintain the following distinction:

Target population: All eligible employees of the selected pharmaceutical company who were enrolled in the medical insurance program.

Final analytical sample: 247 eligible and consenting employees included in the statistical analysis.

The number 263 denotes submitted questionnaires, whereas 247 denotes the eligible analytical sample. This distinction is maintained throughout the study.

Data Collection Procedures

The analysis used a structured questionnaire as the primary instrument for collecting data from employees of the selected pharmaceutical company. The employee questionnaire was judged appropriate because the study required standardized information from a relatively large group of respondents and sought to measure employees' perceptions numerically.

The survey was developed according to the study objectives, research questions, hypotheses, theoretical framework, and variables. It was divided into sections covering demographic information, health-insurance benefits, employees' psychological stability, use of healthcare services, insurance awareness, and medical fraud-control arrangements.

The questionnaire used a five-point Likert scale consisting of:

1. Strongly Disagree.
2. Disagree.
3. Neutral.
4. Agree.
5. Strongly Agree.

The Likert scale allowed participants to indicate the extent to which they agreed or disagreed with each statement.

The data-collection process was conducted through the following procedures:

Questionnaire Development

The questionnaire items were developed based on the concepts and relationships identified in the theoretical framework and previous studies.

The medical insurance benefits section measured employees' perceptions of:

- Adequacy of insurance coverage.
- Accessibility of healthcare providers.
- Availability of medical services.
- Efficiency of claim approval procedures.
- Clarity of insurance policies.
- Quality of services provided through the insurance program.

The psychological stability section included statements relating to:

- Financial security.
- Reduction of healthcare-related anxiety.
- Emotional stability.
- Confidence in obtaining medical treatment.
- Ability to cope with work-related stress.

The healthcare utilization and insurance awareness section examined:

- Understanding of insurance terms and conditions.
- Awareness of covered and non-covered services.
- Responsible use of healthcare services.
- Frequency of healthcare utilization.
- Knowledge of behaviors that may represent insurance misuse.

The medical fraud-prevention section measured employees' perceptions of:

- Clarity of anti-fraud policies.
- Availability of employee-awareness programs.

- Monitoring of healthcare utilization.
- Verification of claims and medical services.
- Confidential reporting procedures.
- Effectiveness of organizational controls.

Content Validity

Before the final distribution, the questionnaire was submitted to academic experts and specialists in relevant areas, including healthcare insurance, human resource management, risk management, and research methodology.

The experts evaluated whether the questionnaire statements were clear, relevant, understandable, and appropriate for measuring the study variables. Their feedback was applied to revise ambiguous statements, remove unnecessary repetition, and improve the overall structure of the questionnaire.

Pilot Study

A pilot study was conducted with a small group of employees who had characteristics similar to those of the target population.

The pilot study was used to:

- Identify unclear or confusing statements.
- Determine whether the questionnaire instructions were understandable.
- Estimate the time required to complete the questionnaire.
- Examine the initial consistency of the measurement items.
- Identify technical or administrative difficulties before the main distribution.

Participants included in the pilot study were not included in the final analytical sample of 247 respondents.

Ethical and Administrative Preparation

Before distributing the questionnaire, the respondents were informed about the academic purpose of the research. They were also informed that participation was voluntary and that they could choose whether to complete the questionnaire.

The employee questionnaire did not request names or direct identifying information. Participants were assured that their responses would remain confidential and would be analyzed collectively rather than individually.

Special care was taken with questions relating to medical insurance misuse. Respondents were not asked to admit that they had committed fraud or to identify another employee. Instead, the questionnaire measured their awareness of insurance rules, perceptions of health-service use, knowledge of potentially inappropriate behaviors, and evaluation of the organization's anti-fraud controls.

Questionnaire Distribution

The questionnaire was distributed electronically, in printed form, or through the organizational communication channels available during the data-collection period.

Eligible employees received an explanation of:

- The purpose of the study.
- The voluntary nature of participation.
- The approximate completion requirements.
- The confidentiality of their responses.
- The academic use of the collected data.

Participants completed the questionnaire independently. No respondent was required to provide information that could directly identify them.

Collection and Screening

After the data-collection period ended, the submitted questionnaires were collected and reviewed.

The screening process included:

- Checking the completeness of each questionnaire.
- Identifying duplicate responses.
- Verifying eligibility according to the inclusion criteria.
- Reviewing missing responses.
- Examining unusual or inconsistent answer patterns.
- Removing questionnaires that were not suitable for analysis.

After screening, 247 eligible and consenting responses were retained.

Data Coding

Each questionnaire response was assigned a numerical code. The five Likert-scale categories were coded from 1 to 5.

Demographic variables were also assigned numerical codes to facilitate statistical analysis. For example, separate codes were assigned to age groups, educational qualifications, departments, and years of experience.

The coded data were entered into a statistical software program and reviewed for entry errors before analysis.

Confidentiality and Data Protection

The collected data were stored securely and used only for academic purposes. Access to the dataset was limited to the researcher and authorized academic supervisors.

The statistical evidence were presented through aggregated statistics, such as frequencies, percentages, means, correlations, and regression coefficients. No individual employee was identified in the research report.

Study Delimitations

The research was conducted within clearly defined temporal, spatial, human, and subject boundaries. These delimitations identify the scope of the research and clarify the context within which the findings should be interpreted.

Temporal Delimitation

The temporal delimitation refers to the period during which the questionnaire data were collected.

The analysis examined employees' perceptions during the data-collection period in 2026. The exact period should be reported in the final methodology as follows:

The questionnaire was distributed and collected during the 2026 data-collection period.

Because the study adopted a cross-sectional design, the data represent employees' perceptions at one specific period. The research did not follow employees over several years and did not measure changes in insurance benefits, psychological stability, or fraud-prevention procedures over time.

Changes made to the medical insurance program after the data-collection period are therefore outside the temporal scope of the study.

Spatial Delimitation

The spatial delimitation of the study was restricted to one selected pharmaceutical company operating in the Kingdom of Saudi Arabia.

The case study focused on the organizational environment in which the company's employees received medical insurance coverage. The evidence from the 247 cases were therefore influenced by the selected company's:

- Insurance policy.
- Provider network.
- Benefit limits.
- Approval procedures.
- Internal communication.
- Monitoring practices.
- Employee characteristics.
- Organizational policies.

The study was geographically limited to the selected pharmaceutical company in Saudi Arabia.

No claim is made that the findings represent every pharmaceutical company or every region of Saudi Arabia.

Because the research focused on one organization, the findings should not be generalized automatically to all pharmaceutical companies or private-sector organizations in Saudi Arabia. Other companies may provide different insurance benefits and apply different fraud-prevention procedures.

Human Delimitation

The human scope of the study was limited to employees of the selected pharmaceutical company who were enrolled in the company's employer medical-insurance scheme.

Employees who were not covered by the insurance program were excluded because they did not have sufficient direct experience to evaluate the benefits, provider accessibility, approval procedures, and anti-fraud controls.

The final study sample consisted of 247 eligible employee responses.

Healthcare providers, insurance-company employees, brokers, managers, and employees' dependents were not independently surveyed. It follows that the findings represent the perceptions of insured employees rather than the perceptions of every party involved in the insurance system.

Subject Delimitation

The subject scope of the study was limited to examining the impact of medical insurance benefits on:

- Employees' psychological stability.
- Healthcare-utilization patterns.
- Insurance awareness.
- Responsible use of medical services.
- The perceived effectiveness of medical fraud-prevention mechanisms.

Medical insurance benefits were examined through coverage adequacy, healthcare-provider accessibility, service availability, approval efficiency, policy clarity, and service quality.

Psychological stability was examined through financial security, healthcare-related anxiety, emotional stability, treatment confidence, and the ability to cope with work-related stress.

Fraud prevention was examined through awareness, policy clarity, monitoring, claims verification, confidential reporting, and organizational controls.

The study did not conduct clinical assessments of employees' mental health. It also did not diagnose psychological disorders.

The research did not investigate or legally confirm individual cases of insurance fraud. It measured employees' perceptions of utilization, awareness, potential misuse indicators, and fraud-prevention effectiveness.

The research also did not conduct a complete financial audit of insurance claims, healthcare providers, or insurance-company records. Confirming actual fraud would require claims data, clinical reviews, formal investigations, and evidence beyond the employee questionnaire.

Method of Analysis

The collected data were coded, entered, screened, and analyzed using IBM SPSS Statistics or the statistical software adopted by the researcher.

The analysis was conducted in several stages to describe the sample, evaluate the measurement instrument, and test the research hypotheses.

Data Screening

Before conducting the main statistical analysis, the dataset was reviewed to ensure its quality and suitability.

The screening procedures included:

- Checking for missing values.
- Identifying duplicate responses.
- Reviewing incomplete questionnaires.
- Detecting data-entry errors.
- Examining unusual response patterns.
- Identifying potential outliers.
- Confirming that the final dataset contained 247 eligible analytical cases.

Missing values were handled according to their amount and distribution. Questionnaires with substantial missing information were excluded, while limited missing values could be treated according to an appropriate statistical procedure.

Descriptive Statistics

Descriptive statistics were used to summarize the characteristics of the respondents and the main study variables.

Frequencies and percentages were used to describe categorical demographic variables, including:

- Gender.
- Age group.
- Educational qualification.
- Department.
- Years of work experience.
- Duration of enrollment in the medical insurance program.

Means and standard deviations were used to describe the Likert-scale statements and dimensions.

The mean indicated the general level of respondents' agreement, while the standard deviation indicated the degree of variation among their responses.

Descriptive analysis was conducted for:

- Medical insurance benefits.
- Employees' psychological stability.
- Healthcare utilization.
- Insurance awareness.
- Medical fraud-prevention mechanisms.

Reliability Analysis

Cronbach's Alpha was used to examine the internal consistency of the questionnaire.

Reliability was calculated separately for each principal dimension and for the overall instrument. A Cronbach's Alpha coefficient of 0.70 or higher was treated as an acceptable level of internal consistency.

The reliability analysis included:

- Medical insurance benefits.
- Psychological stability.
- Healthcare utilization and insurance awareness.
- Medical fraud prevention.

Items that substantially reduced the reliability of a dimension could be reviewed before constructing the final composite score.

Validity Assessment

Content validity was established through expert review during the questionnaire-development stage.

Where appropriate, construct validity could also be examined using item-total correlations or exploratory factor analysis. These procedures help determine whether the questionnaire items are associated with the dimensions they were designed to measure.

The suitability of factor analysis, where conducted, should be evaluated using appropriate statistical tests, including the Kaiser–Meyer–Olkin measure and Bartlett's Test of Sphericity.

Correlation Analysis

Pearson's correlation coefficient served to examine the direction and strength of the relationships among the quantitative study variables when the relevant assumptions were satisfied.

The correlation analysis examined relationships such as:

- Medical insurance benefits and psychological stability.
- Coverage adequacy and financial security.
- Insurance awareness and responsible healthcare utilization.
- Healthcare-utilization patterns and potential misuse indicators.
- Monitoring mechanisms and fraud-prevention effectiveness.

A positive correlation indicates that higher values in one variable are associated with higher values in another variable. A negative correlation indicates that higher values in one variable are associated with lower values in another variable.

Correlation does not independently prove causation. The findings should therefore be interpreted as statistical associations within the cross-sectional data.

Regression Analysis

Regression analysis was used to examine the effect of the independent variables on the dependent variables and test the research hypotheses.

A regression model was used to examine the effect of medical insurance benefits on employees' psychological stability.

Additional regression models could be used to examine:

- The effect of coverage adequacy on psychological stability.
- The relationship between utilization patterns and potential insurance misuse.

- The effect of monitoring mechanisms on fraud-prevention effectiveness.
- The effect of insurance awareness on responsible utilization and misuse risk.

The regression analysis reported:

- Regression coefficients.
- Standard errors.
- Standardized beta coefficients.
- The coefficient of determination.
- Test statistics.
- Significance values.

Before interpreting the regression results, the researcher examined assumptions such as normality, linearity, independence of errors, homoscedasticity, and multicollinearity.

Differences According to Demographic Characteristics

Where relevant to the research objectives, independent-samples t-tests and one-way analysis of variance could be used to examine whether perceptions differed according to demographic characteristics.

An independent-samples t-test might be used when comparing two groups, while one-way analysis of variance might be used when comparing three or more groups.

These tests could examine whether perceptions of medical insurance benefits or psychological stability differed according to:

- Gender.
- Age group.
- Educational qualification.

- Department.
- Work experience.
- Duration of insurance enrollment.

Post-hoc comparisons should be conducted when analysis of variance identifies a statistically significant difference among more than two groups.

Statistical Significance

The level of statistical significance was set at:

$$p \leq 0.05$$

A result with a significance value equal to or lower than 0.05 was considered statistically significant.

The decision to accept or reject each research hypothesis was based on the relevant statistical test, the direction of the relationship, the size of the effect, and the significance value.

The analysis should not rely only on statistical significance. The researcher should also interpret the practical meaning, direction, and strength of the identified relationships.

Chapter 4: Practical Study

Data Analysis

1. Sample Determination and Data Screening

A total of 263 questionnaire responses were submitted; four respondents did not provide consent and were excluded for ethical reasons. A further 12 respondents did not satisfy the eligibility requirement of being employed by the selected pharmaceutical company and enrolled in its employer medical-insurance scheme. For that reason, the final analytical sample consisted of 247 eligible and consenting respondents.

Screening stage	N	Decision
Initial submitted responses	263	All submitted questionnaires
Did not provide consent	4	Excluded
Not eligible / not enrolled	12	Excluded
Final eligible analytical sample	247	Included in the analysis

Ten responses formed five pairs with identical response profiles. They were flagged but retained because the anonymous questionnaire contained no unique identifiers and identical answer patterns alone do not establish duplication. One straight-line response and two contradictory improvement selections were also flagged for transparency.

2. Sample Characteristics

The characteristics of the final sample were examined using frequencies and percentages. All demographic tables and figures in this section are based on the 247 eligible responses included in the statistical analysis.

2.1 Q3. Gender

Category	Frequency	Percentage
Male	126	51.0%
Female	121	49.0%
Total	247	100.0%

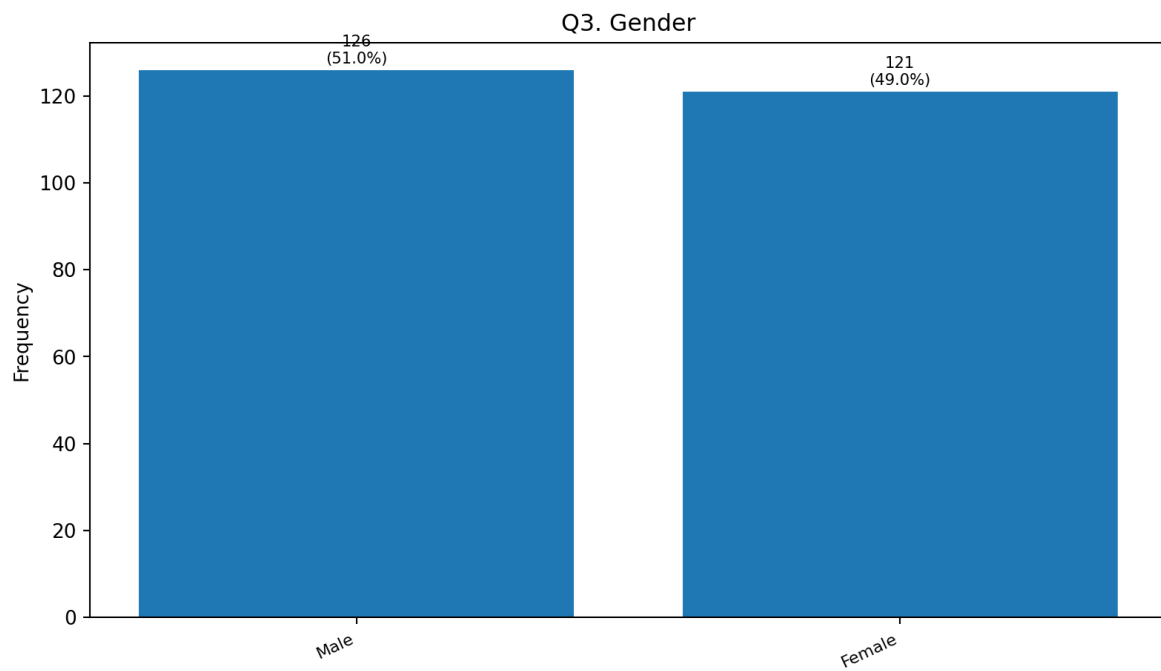


Figure 1. Distribution of respondents by gender.

The gender distribution was nearly balanced. Male respondents represented 51.0% of the sample, while female respondents represented 49.0%. This balance reduces the likelihood that the overall findings are dominated by one gender group.

2.2 Q4. Age Group

Category	Frequency	Percentage
18–24 years	59	23.9%
25–34 years	43	17.4%
35–44 years	56	22.7%
45–54 years	47	19.0%
55 years or above	42	17.0%
Total	247	100.0%

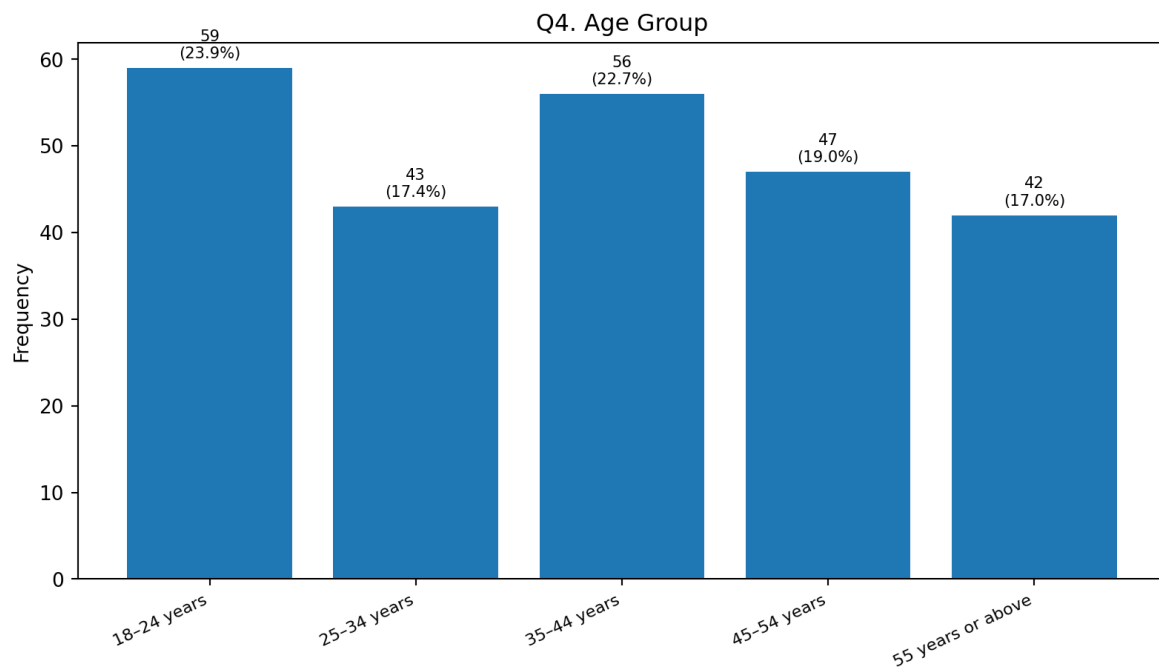


Figure 2. Distribution of respondents by age group.

The sample was distributed across all age categories. The largest group was 18–24 years (23.9%), followed by 35–44 years (22.7%). Respondents aged 55 years or above formed 17.0% of the sample, indicating representation from both younger and more experienced employees.

2.3 Q5. Highest Educational Qualification

Category	Frequency	Percentage
High school or below	43	17.4%
Diploma	43	17.4%
Bachelor's degree	53	21.5%
Master's degree	26	10.5%
Doctoral degree	34	13.8%
Other	48	19.4%
Total	247	100.0%

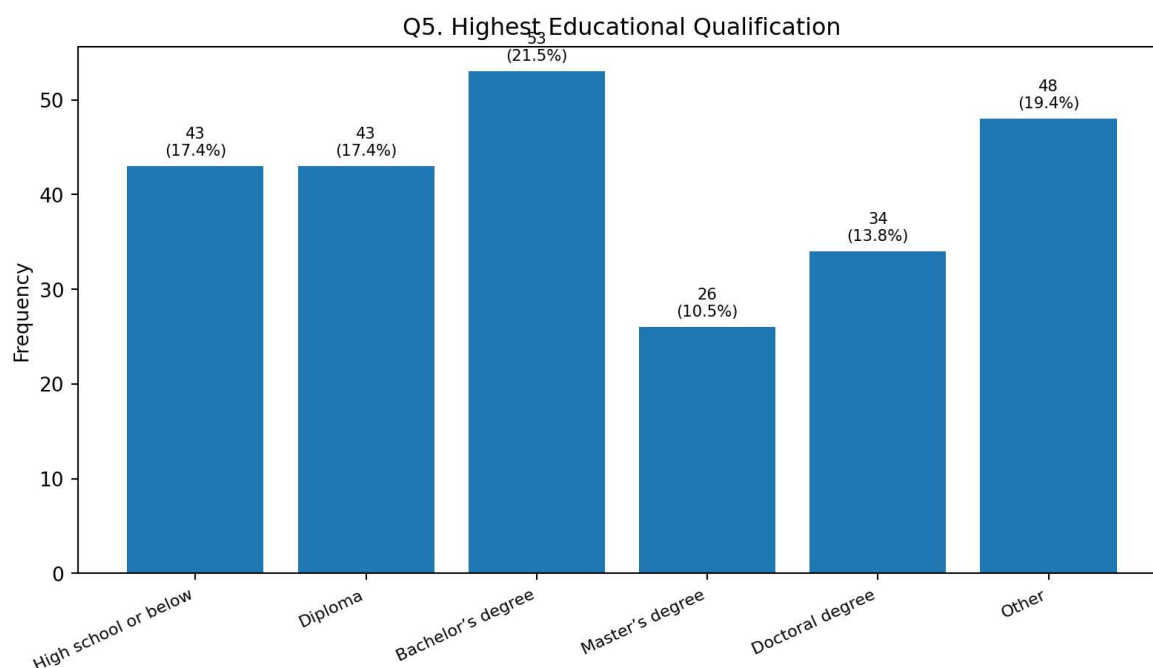


Figure 3. Distribution of respondents by highest educational qualification.

Bachelor's degree holders formed the largest single educational category (21.5%). The sample also included diploma holders, postgraduate degree holders, employees with high-school education or below, and respondents selecting other qualifications, producing a varied educational profile.

2.4 Q6. Department or Functional Area

Category	Frequency	Percentage
Human Resources / Administration	20	8.1%
Sales / Marketing	52	21.1%
Medical / Scientific Affairs	24	9.7%
Regulatory Affairs	20	8.1%
Quality Assurance / Quality Control	30	12.1%
Manufacturing / Production	21	8.5%
Supply Chain / Procurement	33	13.4%
Finance / Accounting	17	6.9%
Other	30	12.1%
Total	247	100.0%

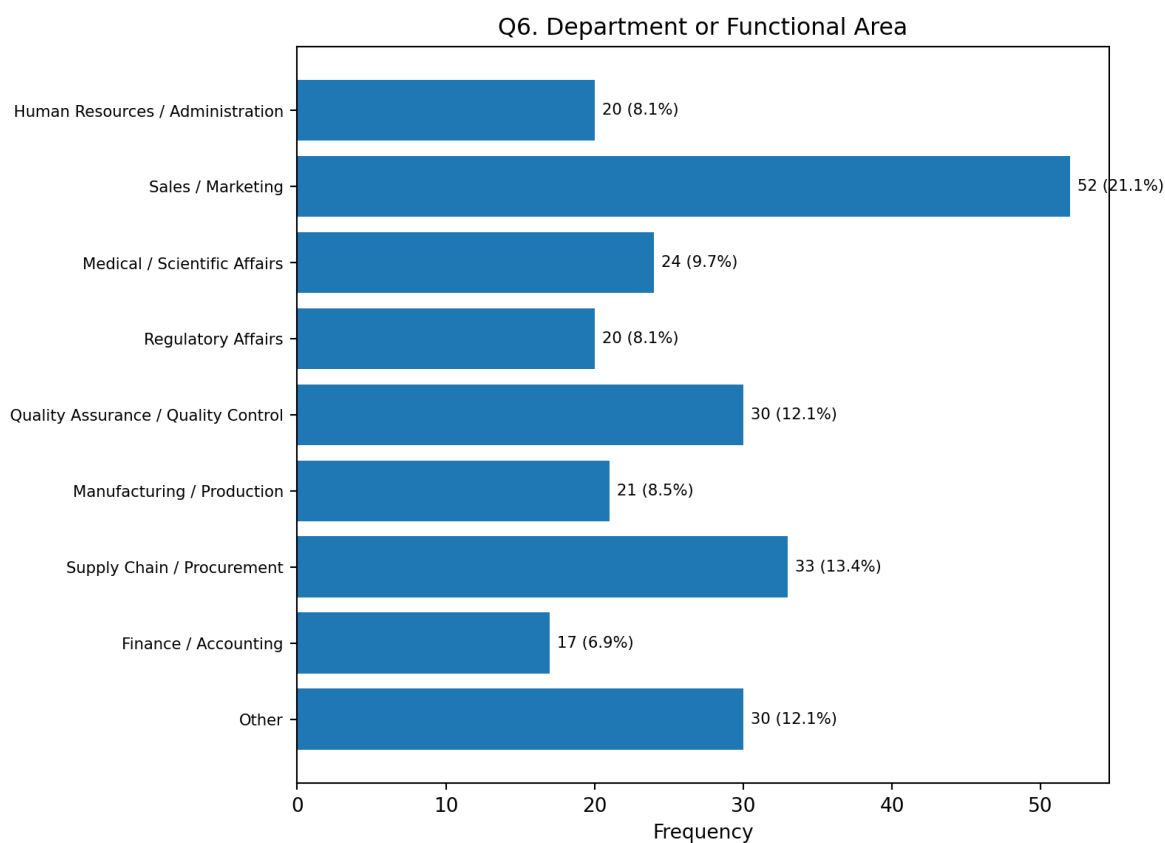


Figure 4. Distribution of respondents by department or functional area.

Sales and Marketing was the largest departmental group (21.1%), followed by Supply Chain / Procurement (13.4%). Employees from medical, regulatory, quality, production, finance, human resources, and other functions were also represented.

2.5 Q7. Total Years of Work Experience

Category	Frequency	Percentage
Less than 1 year	49	19.8%
1–3 years	43	17.4%
4–6 years	39	15.8%
7–10 years	48	19.4%
More than 10 years	68	27.5%
Total	247	100.0%

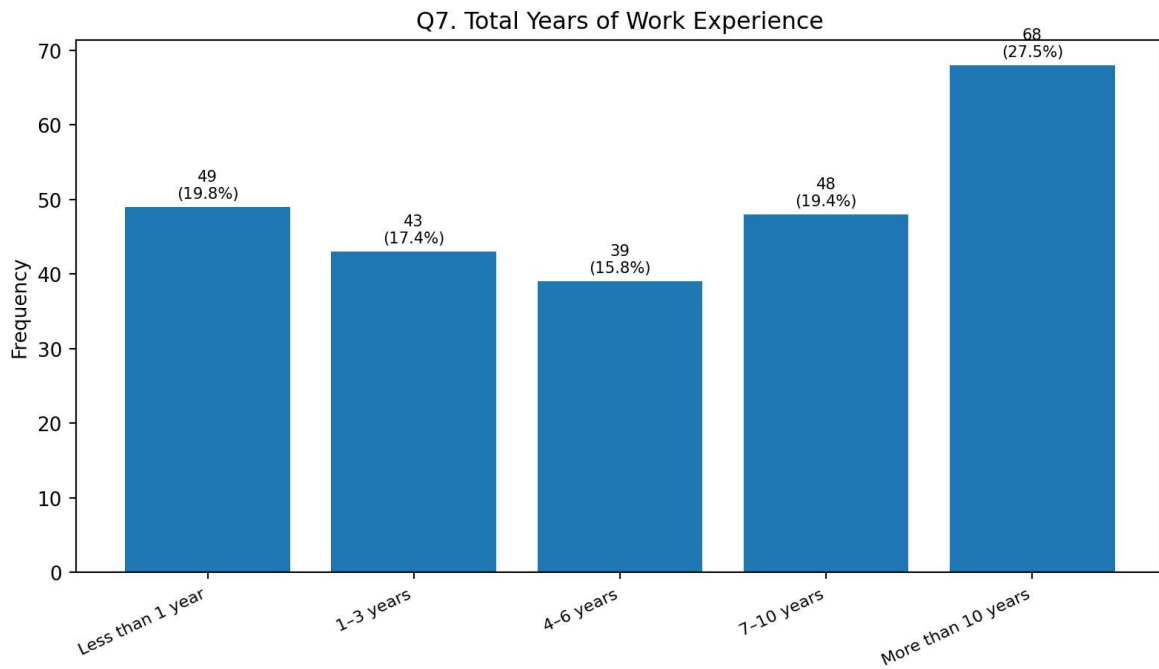


Figure 5. Distribution of respondents by total years of work experience.

Employees with more than 10 years of work experience formed the largest group (27.5%). The remaining respondents were distributed across all shorter experience categories, providing a combination of early-career and highly experienced employees.

3. Descriptive Analysis of Questionnaire Items

The survey instrument items were measured on a five-point Likert scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = Strongly Agree. Arithmetic means and standard deviations were calculated for each item. Mean values were interpreted using equal-width intervals.

Mean interval	Interpretation
1.00–1.80	Strongly disagree
1.81–2.60	Disagree
2.61–3.40	Neutral
3.41–4.20	Agree
4.21–5.00	Strongly agree

3.1 Medical Insurance Benefits

Item	Statement	Mean	SD	Rank	Interpretation
B1	Insurance covers essential healthcare needs	3.170	1.348	1	Neutral
B2	Coverage limits are sufficient	3.085	1.402	4	Neutral
B3	Provider network offers suitable options	3.085	1.390	4	Neutral
B4	Approved providers are accessible	2.943	1.444	8	Neutral
B5	Approvals are completed in reasonable time	3.134	1.332	3	Neutral
B6	Policy and exclusions are clearly explained	3.142	1.370	2	Neutral
B7	Inquiries and complaints are handled effectively	2.972	1.348	7	Neutral
B8	Overall satisfaction with insurance benefits	3.028	1.410	6	Neutral

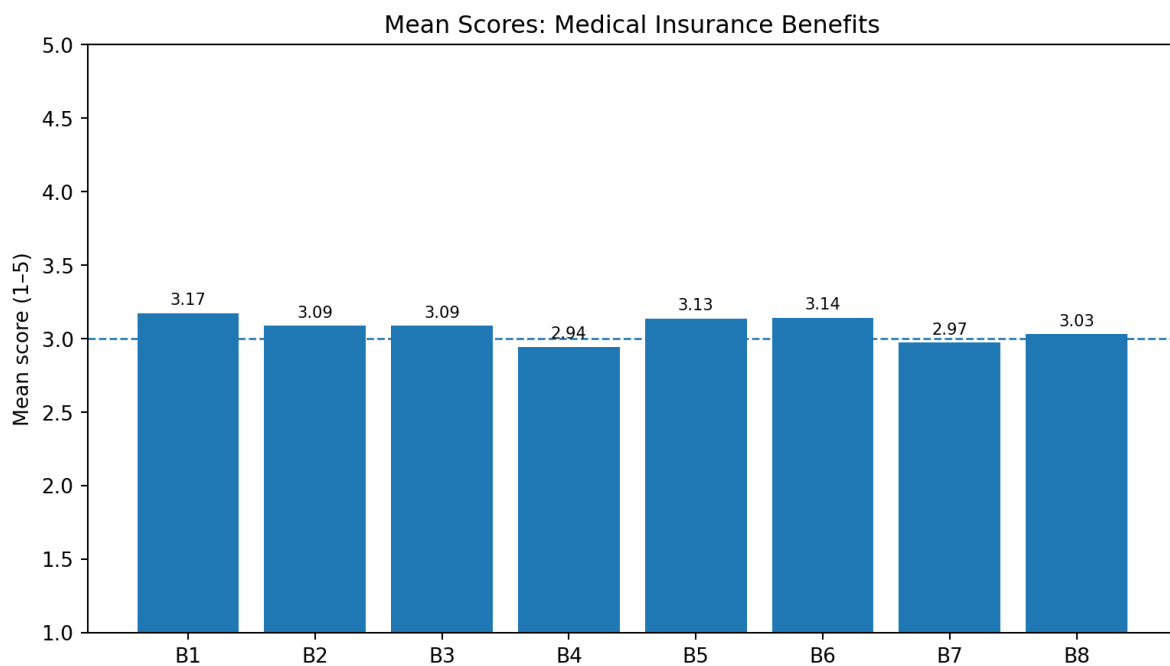


Figure 6. Mean scores for medical insurance benefits.

All item means were within the neutral range. The highest mean was recorded for essential healthcare coverage (B1, $M = 3.17$), while provider accessibility recorded the lowest mean (B4, $M = 2.94$). The observed results indicate neither strong satisfaction nor strong dissatisfaction with the insurance benefits.

3.2 Employees' Psychological Stability

Item	Statement	Mean	SD	Rank	Interpretation
C1	Insurance provides financial security	2.927	1.418	5	Neutral
C2	Insurance reduces worry about healthcare expenses	2.838	1.478	8	Neutral
C3	Confidence in obtaining treatment	2.919	1.400	6	Neutral
C4	Insurance contributes to emotional reassurance	3.012	1.421	4	Neutral
C5	Insurance helps focus on work	3.024	1.382	3	Neutral
C6	Insurance indicates organizational care	3.061	1.468	2	Neutral
C7	Approval delays cause stress	2.879	1.423	7	Neutral
C8	Coverage uncertainty affects peace of mind	3.093	1.418	1	Neutral

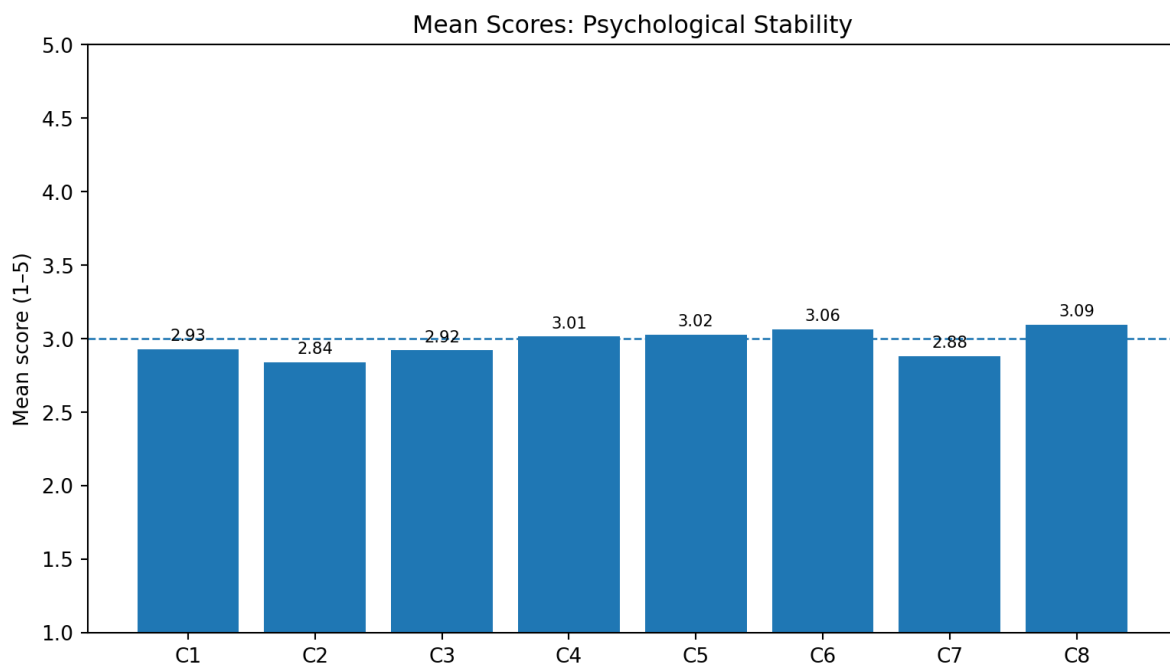


Figure 7. Mean scores for employees' psychological stability.

The psychological-stability items also produced neutral average responses. Coverage uncertainty affecting peace of mind (C8) had the highest original item mean ($M = 3.09$), while insurance reducing worry about healthcare expenses (C2) had the lowest mean ($M = 2.84$). C7 and C8 are negatively worded and were reverse-scored when calculating the positive psychological-stability composite.

3.3 Insurance Awareness and Responsible Healthcare Use

Item	Statement	Mean	SD	Rank	Interpretation
D1	Understands covered services	2.903	1.467	7	Neutral
D2	Understands exclusions and prior authorization	2.895	1.387	8	Neutral
D3	Knows insurance card and approval procedure	3.032	1.420	2	Neutral
D4	Understands misuse behaviors	2.947	1.400	6	Neutral
D5	Uses healthcare only for genuine need	3.101	1.377	1	Neutral
D6	Avoids unnecessary repeated visits or tests	3.020	1.410	3	Neutral
D7	Contacts responsible department when unsure	3.020	1.416	3	Neutral
D8	Understands unnecessary use increases costs	2.951	1.402	5	Neutral

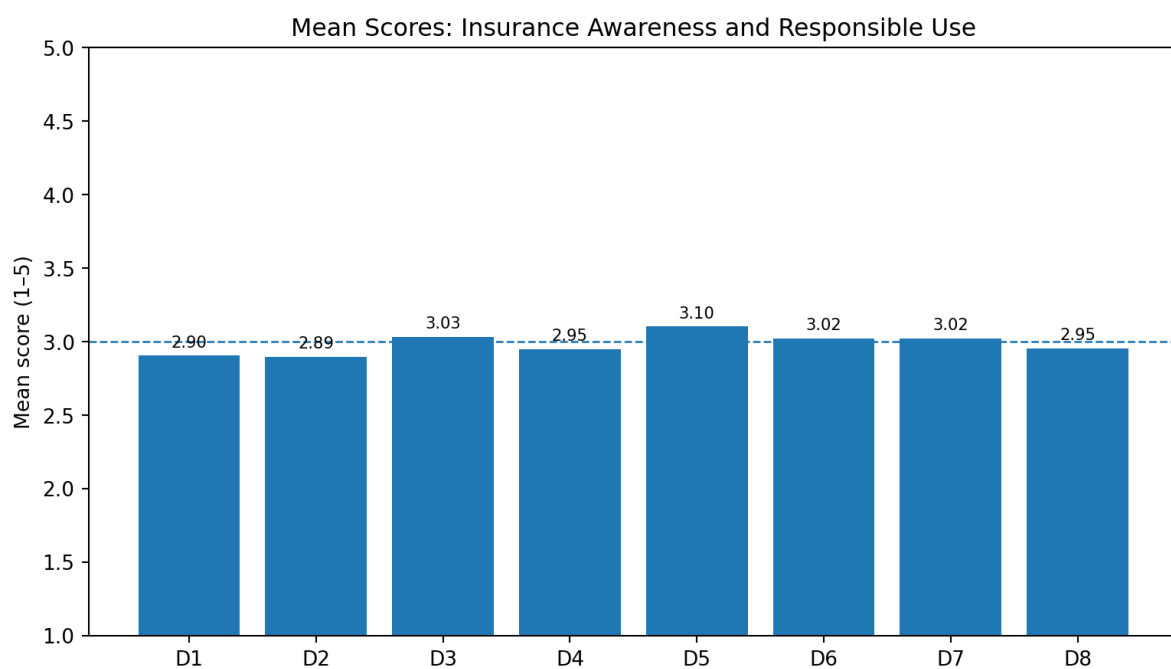


Figure 8. Mean scores for insurance awareness and responsible healthcare use.

All awareness and responsible-use items were in the neutral range. The highest mean was for using healthcare services only for genuine need (D5, $M = 3.10$). Understanding exclusions and prior authorization requirements (D2, $M = 2.90$) had the lowest mean, suggesting a potential communication area.

3.4 Medical Fraud Prevention and Monitoring

Item	Statement	Mean	SD	Rank	Interpretation
E1	Organization communicates misuse and fraud policies	3.012	1.416	4	Neutral
E2	Employees receive awareness on prohibited practices	3.089	1.409	3	Neutral
E3	Utilization and claims are monitored	3.000	1.343	5	Neutral
E4	Unusual claim patterns can be identified	3.174	1.384	1	Neutral
E5	Approval and review procedures are effective	2.951	1.436	8	Neutral
E6	Confidential reporting channel is available	2.992	1.411	6	Neutral
E7	Concerns can be reported without unfair consequences	2.972	1.378	7	Neutral
E8	Controls reduce misuse without restricting care	3.154	1.417	2	Neutral

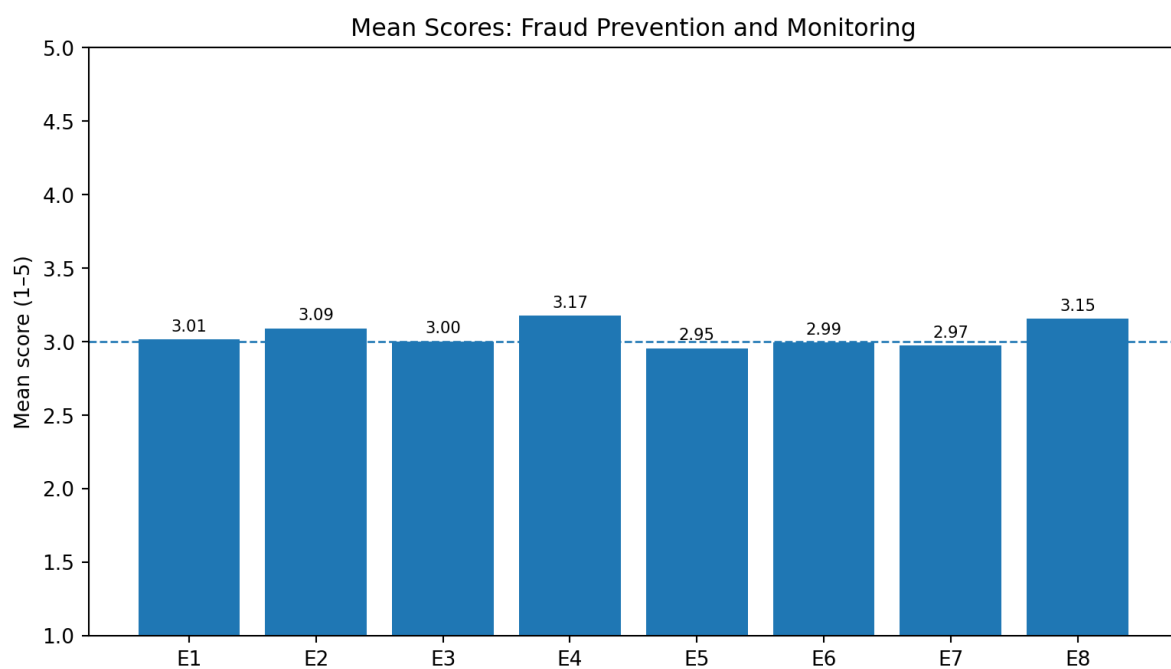


Figure 9. Mean scores for medical fraud prevention and monitoring.

Fraud-prevention items were generally neutral. The highest mean concerned the perceived ability to identify unusual claim patterns (E4, $M = 3.17$), followed by controls reducing misuse without restricting legitimate care (E8, $M = 3.15$). The lowest mean concerned the effectiveness of approval and review procedures (E5, $M = 2.95$).

4. Construct-Level Descriptive Statistics and Reliability

Construct	Items	N	Mean	SD	Cronbach's alpha	Reliability assessment
Medical Insurance Benefits	8	247	3.070	0.514	0.111	Unacceptable
Psychological Stability	8	247	2.976	0.520	0.067	Unacceptable
Insurance Awareness	6	247	2.958	0.638	0.215	Unacceptable
Responsible Healthcare Use	2	247	3.061	1.000	0.059	Unacceptable
Fraud Prevention and Monitoring	8	247	3.043	0.506	0.050	Unacceptable

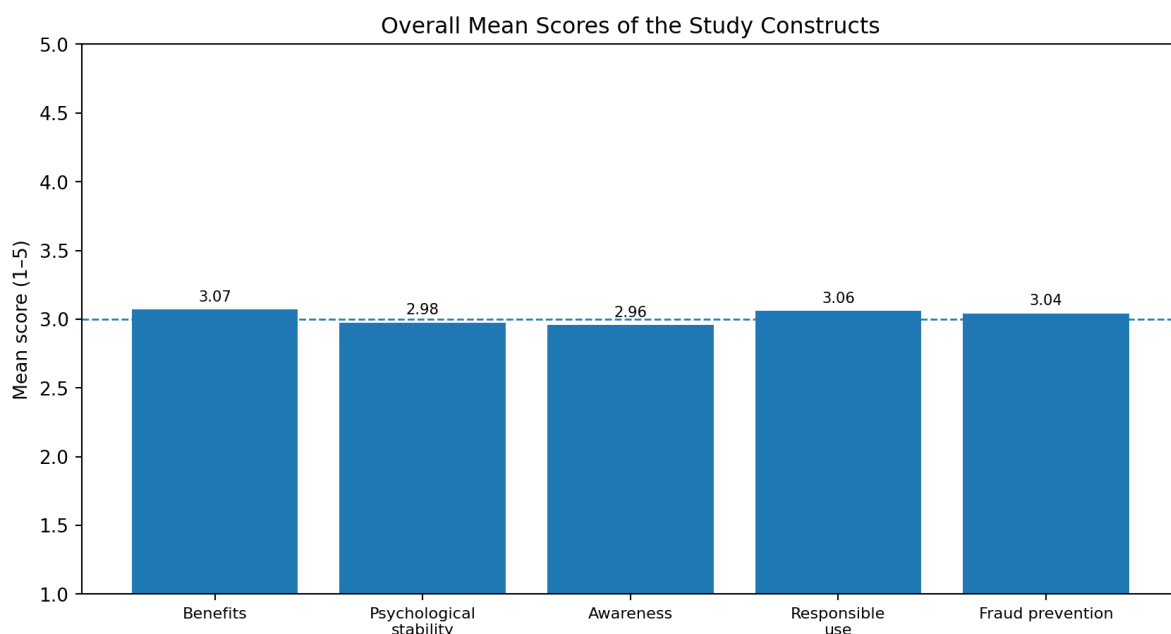


Figure 10. Overall mean scores of the study constructs.

The overall construct means were close to the neutral midpoint of 3.00. Medical insurance benefits had a mean of 3.070, psychological stability had a mean of 2.976, insurance awareness had a mean of 2.958, responsible healthcare use had a mean of 3.061, and fraud prevention and monitoring had a mean of 3.043.

The Cronbach's alpha coefficients were substantially below the conventional threshold of 0.70. This indicates weak internal consistency among the items intended to measure each construct. In practical terms, the composite-score correlations and regression results should be interpreted cautiously and treated as exploratory rather than definitive confirmation of the theoretical model.

5. Hypothesis Testing

Hypothesis	Statement	Statistical test	Statistic	p value	Decision
H1	Medical insurance benefits positively influence psychological stability.	Pearson correlation: BMEAN with CMEAN	0.076	0.233	Not supported
H2a	Coverage adequacy is associated with psychological stability.	Pearson correlation: COVADEQ with CMEAN	-0.025	0.700	Not supported
H2b	Coverage adequacy is associated with overall insurance satisfaction.	Pearson correlation: COVADEQ with B8	0.048	0.449	Not supported
H3	Healthcare utilization is associated with medical-insurance misuse risk.	Spearman correlation: UTIL with MISUSE proxy	-0.000	0.994	Not supported
H4	Fraud-prevention mechanisms are associated with lower misuse risk.	Pearson correlation: EMEAN with MISUSE proxy	-0.103	0.107	Not supported
H5	Greater insurance awareness is associated with lower misuse risk.	Pearson correlation: AWARE with MISUSE proxy	-0.267	<.001	Supported statistically, but exploratory

H1 was not supported because the association between insurance benefits and psychological stability was weak and not statistically significant ($r = 0.076$, $p = 0.233$). H2a and H2b were also not supported because coverage adequacy was not significantly associated with psychological stability or overall insurance satisfaction.

H3 was not supported because healthcare-utilization frequency had virtually no relationship with the misuse-risk proxy (Spearman's $\rho \approx 0.000$, $p = 0.994$). H4 was not supported because perceived fraud-control arrangements were not significantly associated with lower misuse risk ($r = -0.103$, $p = 0.107$).

H5 was the only statistically supported hypothesis. Greater insurance awareness was associated with lower misuse risk ($r = -0.267$, $p < 0.001$). The relationship was small to moderate in size and should remain exploratory because the awareness scale had weak reliability.

6. Regression Analysis

Model	Predictor	B	SE	β	t	p	R ²	Model p
Model 1: CMEAN	BMEAN	0.077	0.064	0.076	1.195	0.233	0.006	0.233
Model 2: MISUSE	AWARE	-0.413	0.096	-0.266	-4.300	<.001	0.078	<.001
Model 2: MISUSE	EMEAN	-0.166	0.123	-0.084	-1.351	0.178	0.078	<.001
Model 2: MISUSE	UTIL	-0.006	0.055	-0.006	-0.105	0.917	0.078	<.001

Model 1 tested whether the medical-insurance package predicted psychological stability. The framework was not statistically significant, $F(1, 245) = 1.429$, $p = 0.233$, and explained only 0.6% of the variance in psychological stability ($R^2 = 0.006$). Medical insurance benefits were not a significant predictor ($B = 0.077$, $\beta = 0.076$, $p = 0.233$).

Model 2 examined whether insurance awareness, fraud-prevention perceptions, and healthcare-utilization frequency predicted the misuse-risk proxy. The overall model was statistically significant, $F(3, 242) = 6.859$, $p < 0.001$, but its explanatory power was limited ($R^2 = 0.078$; adjusted $R^2 = 0.067$). Insurance awareness was the only significant predictor ($B = -0.413$, $\beta = -0.266$, $p < 0.001$). Fraud-prevention perceptions and utilization frequency were not significant predictors.

Model	Diagnostic	Value	Interpretation
Model 1	Durbin–Watson	1.920	Approximately 2; residual independence acceptable
Model 1	Breusch–Pagan p	0.257	No statistically significant heteroscedasticity
Model 2	Durbin–Watson	2.023	Approximately 2; residual independence acceptable
Model 2	Breusch–Pagan p	0.089	No statistically significant heteroscedasticity
Model 2	Maximum VIF	1.010	No multicollinearity concern

The regression diagnostics did not identify serious residual-independence, heteroscedasticity, or multicollinearity concerns. Even so, the weak internal consistency of the composite measures remains the main limitation affecting the interpretation of the models.

7. Differences According to Sample Characteristics

Welch’s independent-samples t-tests were used for gender comparisons, while one-way analysis of variance was used for age, education, department, and work-experience comparisons.

The tested outcomes were the medical-insurance package, psychological stability, insurance awareness, fraud prevention, and the misuse-risk proxy.

Grouping variable	Outcome	Test	Statistic	p value	Decision
Gender	Medical insurance benefits	Welch t-test	0.792	0.429	Not significant
Gender	Psychological stability	Welch t-test	-0.584	0.560	Not significant
Gender	Insurance awareness	Welch t-test	-0.511	0.610	Not significant
Gender	Fraud prevention	Welch t-test	-1.846	0.066	Not significant
Gender	Misuse-risk proxy	Welch t-test	-0.425	0.671	Not significant
Age group	Medical insurance benefits	One-way ANOVA	2.020	0.092	Not significant
Age group	Psychological stability	One-way ANOVA	0.178	0.950	Not significant
Age group	Insurance awareness	One-way ANOVA	0.285	0.888	Not significant
Age group	Fraud prevention	One-way ANOVA	0.609	0.656	Not significant
Age group	Misuse-risk proxy	One-way ANOVA	0.456	0.768	Not significant
Educational qualification	Medical insurance benefits	One-way ANOVA	0.925	0.465	Not significant
Educational qualification	Psychological stability	One-way ANOVA	0.342	0.887	Not significant
Educational qualification	Insurance awareness	One-way ANOVA	0.997	0.420	Not significant
Educational qualification	Fraud prevention	One-way ANOVA	0.561	0.730	Not significant
Educational qualification	Misuse-risk proxy	One-way ANOVA	1.153	0.333	Not significant
Department	Medical insurance benefits	One-way ANOVA	1.380	0.206	Not significant
Department	Psychological stability	One-way ANOVA	0.777	0.623	Not significant
Department	Insurance awareness	One-way ANOVA	1.190	0.305	Not significant
Department	Fraud prevention	One-way ANOVA	1.413	0.192	Not significant
Department	Misuse-risk proxy	One-way ANOVA	1.835	0.071	Not significant
Work experience	Medical insurance benefits	One-way ANOVA	0.857	0.491	Not significant
Work experience	Psychological stability	One-way ANOVA	1.126	0.345	Not significant

Grouping variable	Outcome	Test	Statistic	p value	Decision
Work experience	Insurance awareness	One-way ANOVA	1.219	0.303	Not significant
Work experience	Fraud prevention	One-way ANOVA	1.161	0.329	Not significant
Work experience	Misuse-risk proxy	One-way ANOVA	1.526	0.195	Not significant

No statistically significant differences were identified at $p \leq 0.05$ across gender, age group, educational qualification, department, or work experience for the principal study outcomes. The result suggests that the overall response patterns were broadly similar across the demographic groups represented in the sample.

8. Improvement Priorities and Open-Ended Responses

Priority	Selections	% of final sample	% among respondents to the item
Coverage limits	34	13.8%	16.0%
Approved healthcare-provider network	25	10.1%	11.8%
Speed of medical approvals	34	13.8%	16.0%
Clarity of policy terms and exclusions	32	13.0%	15.1%
Handling of inquiries and complaints	28	11.3%	13.2%
Employee awareness and communication	24	9.7%	11.3%
Monitoring and fraud-prevention controls	28	11.3%	13.2%
No major improvement is needed	34	13.8%	16.0%

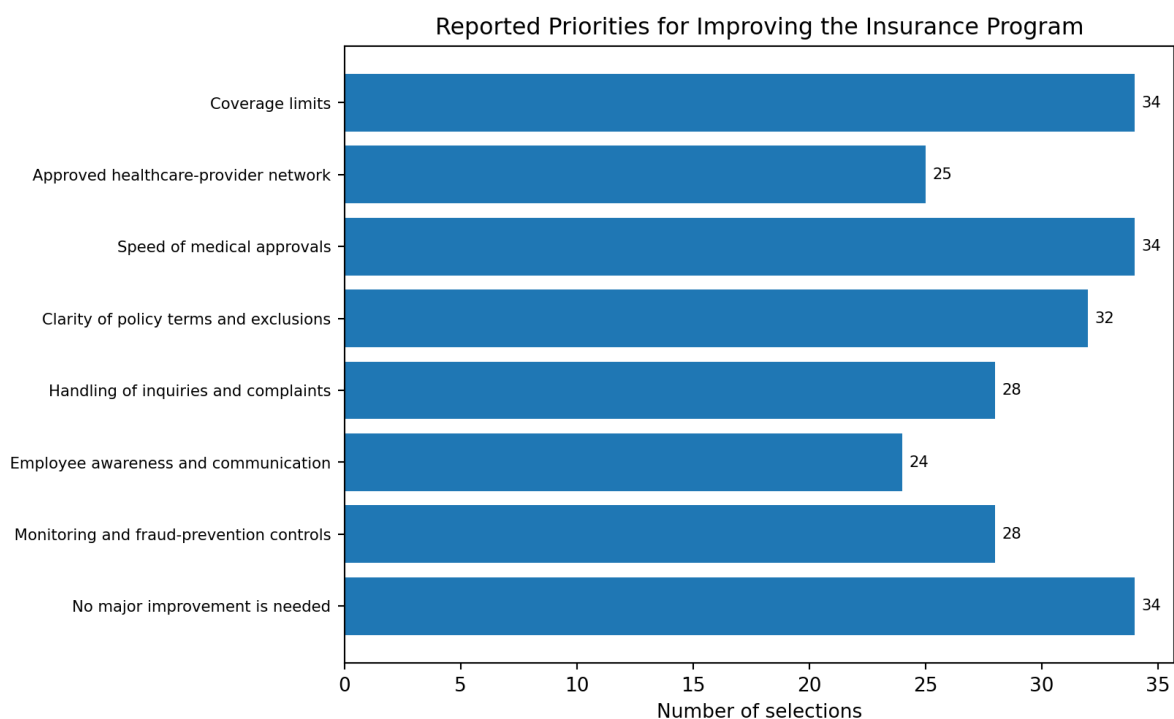


Figure 11. Reported priorities for improving the medical insurance program.

Coverage limits, the speed of medical approvals, and the view that no major improvement was needed each received 34 selections. Clarity of policy terms and exclusions received 32 selections. Because respondents could select more than one option, the percentages should not be added to 100%.

Open-ended theme	N	Percentage of comments
No suggestion	56	23.3%
Faster response / shorter waiting	56	23.3%
Increase staffing	29	12.1%
Website and digital services	52	21.7%
Parking facilities	45	18.8%
Clarify policy terms	1	0.4%
Tiered network / provider optimization	1	0.4%

The most frequent open-ended themes were no specific suggestion and requests for faster responses or shorter waiting times. Digital services, parking facilities, additional staffing, and clearer policy terms also appeared in the comments.

9. Overall Statistical Conclusion

The analytical sample consisted of 247 eligible and consenting employees from 263 submitted responses. The demographic structure was diverse and relatively balanced, with representation across gender, age, education, departments, and work-experience categories.

At the descriptive level, the means of nearly all questionnaire items and all major constructs were close to the neutral midpoint. Respondents therefore did not express consistently strong positive or negative evaluations of the insurance benefits, psychological outcomes, awareness, responsible utilization, or fraud-control arrangements.

Most proposed relationships were not statistically supported; the only statistically significant finding was that greater insurance awareness was associated with lower misuse risk. This pattern was also confirmed in the multiple-regression model, where awareness was the only significant predictor of the misuse-risk proxy.

The reliability coefficients of the study scales were very low. This is a major measurement limitation and means that the hypothesis tests should be interpreted as exploratory. Before using the instrument in a future confirmatory study, the questionnaire items should be revised, narrowed to more coherent constructs, reviewed by specialists, and tested through a pilot study with reliability and factor analysis.

Appendix: Statistical Variable Key

Variable	Meaning
BMEAN	Mean score of medical insurance benefits items B1–B8
CMEAN	Mean positive psychological-stability score; C7 and C8 reverse-scored
COVADEQ	Mean coverage-adequacy score from B1 and B2
AWARE	Mean insurance-awareness score
RESPUSE	Mean responsible-healthcare-use score
MISUSE	Misuse-risk proxy calculated as 6 minus responsible-use score
EMEAN	Mean fraud-prevention and monitoring score

Research Findings and Discussion

Introduction

This section presents and discusses the principal findings of the study concerning the medical-insurance package, employees' psychological stability, patterns of medical-service use, insurance awareness, and medical fraud prevention within the selected pharmaceutical company in Saudi Arabia. The evidence from the 247 cases are interpreted in relation to the research questions, hypotheses, theoretical framework, and relevant previous studies.

A total of 263 questionnaire responses were initially submitted. After data screening, four responses were excluded because the respondents did not provide consent, while twelve responses were excluded because the respondents did not meet the eligibility requirement of being employed by the selected pharmaceutical company and enrolled in its health-insurance programme. As a result, the final statistical analysis was based on 247 eligible and consenting respondents.

The sample was relatively diverse in terms of gender, age, educational qualification, department, and work experience. Male respondents represented 51.0% of the sample, while female respondents represented 49.0%. Participants were also distributed across different age groups, educational levels, functional departments, and experience categories. This diversity supported the examination of the study variables across different employee groups.

Findings Related to Medical Insurance Benefits

The overall mean score for insurance benefits was 3.070, which was close to the neutral midpoint of the five-point Likert scale. A reasonable interpretation is that employees did not report a consistently positive or negative evaluation of the company insurance programme.

The highest-rated statement in this dimension concerned the ability of the insurance plan to cover essential healthcare needs, with a mean of 3.170. This finding suggests that respondents generally recognized that the insurance program provided a basic level of medical protection. That said, the mean remained within the neutral range and did not indicate strong satisfaction.

The lowest-rated statement concerned the accessibility of approved healthcare providers, with a mean of 2.943. The effectiveness of handling insurance inquiries and complaints also received a relatively low mean of 2.972. The combined evidence suggest that the main areas of concern is potentially related to the practical use and administration of insurance rather than the formal existence of coverage.

The neutral evaluation may indicate that employees had different experiences with the insurance program. Some employees may have received adequate and timely healthcare services, while others may have experienced difficulties relating to provider accessibility, coverage limits, approvals, or complaints. The relatively large standard deviations of the individual items support the presence of variation among respondents.

The result partly differs from the conclusions of Hong, Ford, and Jong, who found through a meta-analysis of 134 studies that the availability and subjective evaluation of employee benefits were associated with employee well-being, perceived organizational support, job satisfaction, and organizational commitment. Their findings also indicated that employees' subjective evaluation of benefits was often more important than the mere availability or use of those benefits.

The difference might be explained by the neutral evaluation of the employer medical-insurance scheme in the current study. Medical insurance may only function as a meaningful organizational resource when employees perceive it as accessible, reliable, clearly explained, and responsive to their needs. The formal provision of insurance alone may not be sufficient to generate strongly positive employee outcomes.

Findings Related to Employees' Psychological Stability

The overall mean score for employees' psychological stability was 2.976, indicating a neutral level. Respondents neither strongly agreed nor strongly disagreed that the company insurance programme provided psychological reassurance, reduced healthcare-related anxiety, or enhanced their ability to focus on work.

The highest original item mean was recorded for the statement that uncertainty about insurance coverage affected employees' peace of mind, with a mean of 3.093. Because this statement was negatively worded, the result suggests that uncertainty regarding covered services may create some psychological concern among employees.

The statement that medical insurance demonstrated organizational care received a mean of 3.061, while the statement that medical insurance helped employees focus on their work received a mean of 3.024. The lowest mean, 2.838, was recorded for the statement that medical insurance reduced worry about healthcare expenses.

These results suggest that the existing employer medical-insurance scheme did not generate a strong level of psychological security among respondents. The insurance benefit may have provided a degree of protection, but employees remained uncertain about whether the program sufficiently reduced financial worry or ensured reliable access to healthcare.

The first hypothesis proposed that health-insurance benefits would have a positive and statistically significant relationship with employees' psychological stability. Pearson's correlation coefficient showed a weak positive relationship of $r = 0.076$, with a significance value of $p = 0.233$. Because the significance value exceeded 0.05, the relationship was not statistically significant, and the first hypothesis was not supported.

Regression analysis produced a similar result. Medical insurance benefits explained only 0.6% of the variance in psychological stability. The regression model was not statistically significant, $F(1, 245) = 1.429$, $p = 0.233$. On this basis, perceived the medical-insurance package did not significantly predict psychological stability in the analyzed sample.

That outcome differs from the general expectations of Job Demands–Resources Theory. The theory proposes that organizational resources can reduce the negative effects of job demands and contribute to employee well-being (Bakker & Demerouti, 2017). It also differs from previous evidence indicating that favorable employee-benefit evaluations and organizational support are associated with positive employee attitudes and well-being.

Several factors may explain this difference. First, the theoretical studies examined broader organizational resources and support practices, whereas the current study focused specifically on medical insurance. Psychological stability is potentially influenced by several factors outside the insurance program, including workload, management practices, job security, income, family circumstances, and existing health conditions.

Second, the neutral evaluation of insurance benefits may have reduced the strength of the relationship. An insurance program that employees perceive as only moderately adequate may not provide sufficient psychological reassurance to produce a measurable effect.

Third, the psychological-stability scale had very low internal consistency. On this basis, the items may not have measured one coherent psychological construct. This measurement limitation could have reduced the observed relationship between the medical-insurance package and psychological stability.

The result should consequently not be interpreted as conclusive proof that medical insurance has no psychological value. It indicates that the present study did

not obtain reliable statistical evidence of this effect using the current questionnaire and sample.

Findings Related to Coverage Adequacy

The second hypothesis proposed that greater perceived adequacy of medical insurance coverage would be associated with higher psychological stability and overall insurance satisfaction.

The relationship between coverage adequacy and psychological stability was negative but extremely weak and statistically insignificant, $r = -0.025$, $p = 0.700$. The relationship between coverage adequacy and overall insurance satisfaction was also weak and statistically insignificant, $r = 0.048$, $p = 0.449$. It follows that both parts of the second hypothesis were not supported.

This observation differs from earlier research suggesting that the subjective quality and adequacy of employee benefits are related to employee satisfaction and well-being. Hong et al. found that employees' subjective evaluations of benefits were more strongly related to several employee outcomes than benefit availability or use alone.

The difference may partly result from the way coverage adequacy was measured. This case study constructed the coverage-adequacy measure from a limited number of questionnaire items. A broader measure could have included medication coverage, hospital limits, chronic-disease services, maternity services, dependants' coverage, mental healthcare, out-of-pocket payments, and emergency treatment.

Employees may also assess coverage adequacy differently according to their individual healthcare needs. An employee who rarely uses healthcare may consider the same policy adequate that an employee with a chronic condition or covered dependants considers insufficient. These differences may weaken the overall statistical relationship.

Findings Related to Insurance Awareness and Responsible Healthcare Use

The overall mean score for insurance awareness was 2.958, while responsible healthcare use had an overall mean of 3.061. Both values were close to the neutral midpoint.

The highest-rated awareness and responsible-use statement concerned using healthcare services only for genuine medical needs, with a mean of 3.101. The lowest-rated statement concerned understanding exclusions and prior-authorization requirements, with a mean of 2.895.

These results indicate that employees generally expressed moderate confidence in their responsible use of medical services but may not have had a sufficiently clear understanding of the detailed conditions of the insurance policy. This distinction is important because employees may intend to use their benefits responsibly while still misunderstanding exclusions, approval procedures, provider restrictions, or benefit limits.

The fifth hypothesis proposed that employees with greater insurance awareness would have a lower risk of medical insurance misuse. The evidence from the 247 cases supported this hypothesis statistically. Insurance awareness was negatively associated with the misuse-risk proxy, $r = -0.267$, $p < 0.001$. This means that higher awareness scores were associated with lower misuse-risk scores.

The multiple-regression analysis confirmed this finding. Insurance awareness was the only statistically significant predictor of the misuse-risk proxy, with $B = -0.413$, $\beta = -0.266$, and $p < 0.001$. The complete model explained 7.8% of the variance in misuse risk.

The observed result is consistent with the fraud-prevention perspective included in the theoretical framework. Employees who understand covered services,

exclusions, approval requirements, insurance-card rules, and prohibited practices can be better able to distinguish responsible use from misuse.

The finding also agrees conceptually with the Association of Certified Fraud Examiners' emphasis on fraud awareness, communication, reporting mechanisms, internal controls, and continuous monitoring as important elements of fraud risk management. The previous literature reviewed for the study noted that awareness and reporting were among the mechanisms associated with more effective fraud detection and reduced organizational losses.

Yet the relationship should be interpreted cautiously. The result does not establish that awareness alone prevents fraud, nor does it prove a causal relationship. The insurance-awareness scale had weak reliability, and the misuse measure was a proxy derived from self-reported responsible-use items rather than verified fraud cases.

Still, the finding provides the clearest practical direction in the study: improving employees' understanding of insurance rules can contribute to more responsible use of healthcare services.

Findings Related to Healthcare Utilization and Misuse Risk

The third hypothesis proposed that healthcare-utilization frequency would be significantly associated with the risk of medical insurance misuse. The Spearman correlation was approximately zero, $\rho = -0.000$, with $p = 0.994$. It follows that the third hypothesis was not supported.

The regression analysis also found that utilization frequency was not a statistically significant predictor of misuse risk, with $\beta = -0.006$ and $p = 0.917$.

The observed result demonstrates that frequent use of healthcare services should not automatically be interpreted as evidence of misuse or fraud. Employees may use medical services frequently because of chronic illnesses, necessary follow-up care,

medication needs, preventive examinations, pregnancy, rehabilitation, or covered dependants.

The result is compatible with the distinction between moral hazard and fraud. Einav and Finkelstein concluded that insurance coverage influences healthcare consumption because individuals tend to use less healthcare when their direct costs are higher. Yet this behavioral response does not mean that additional utilization is necessarily fraudulent.

The result is also relevant to the Saudi context; al-Hanawi, Mwale, and Kamninga found that health insurance increased the probability of attending medical check-ups in Saudi Arabia. Their findings indicate that increased use of healthcare services may represent improved access to medical care rather than inappropriate behavior.

The current finding therefore supports the use of clinically informed fraud-detection procedures. Utilization frequency may serve as an initial indicator for review, but it should not be used independently to classify an employee as engaging in misuse.

Findings Related to Medical Fraud Prevention and Monitoring

The overall mean score for medical fraud prevention and monitoring was 3.043, which was within the neutral range.

The highest-rated statement concerned the organization's ability to identify unusual claim patterns, with a mean of 3.174. The second-highest mean, 3.154, concerned the ability of organizational controls to reduce misuse without restricting legitimate healthcare.

The lowest mean, 2.951, concerned the effectiveness of approval and review procedures. Confidential reporting and employees' ability to report concerns without unfair consequences also received relatively low neutral evaluations.

These results suggest that employees had moderate confidence in the general concept of monitoring but were less certain about the effectiveness and fairness of specific procedures.

The fourth hypothesis proposed that effective anti-fraud controls would be associated with lower misuse risk. The correlation was negative but not statistically significant, $r = -0.103$, $p = 0.107$. Fraud-prevention perceptions also failed to predict misuse risk significantly in the regression model, $\beta = -0.084$, $p = 0.178$. For that reason, the fourth hypothesis was not supported.

This observation differs from general occupational-fraud evidence emphasizing the role of monitoring, reporting mechanisms, and internal controls. That said, the result is broadly consistent with Rashidian, Joudaki, and Vian's systematic review, which concluded that robust evidence concerning the effectiveness of many healthcare fraud interventions was limited. The authors identified a need for stronger research designs to evaluate prevention, detection, and response mechanisms.

The absence of a significant relationship may also reflect a difference between the existence of controls and employees' perceptions of those controls. Employees may not have detailed knowledge of insurer investigations, claims analytics, provider audits, or confidential fraud-management procedures. As a result, their responses may not accurately represent the technical effectiveness of the fraud-prevention system.

Differences According to Demographic Characteristics

The study examined whether the main outcomes differed according to gender, age group, educational qualification, department, and work experience.

No statistically significant differences were identified for health-insurance benefits, psychological stability, insurance awareness, fraud-prevention perceptions, or misuse risk across any of the demographic variables.

Taken together, these observations suggest that the general response pattern was broadly similar across the employee groups represented in the sample. Dissatisfaction, uncertainty, awareness needs, and fraud-prevention perceptions were not concentrated within one specific demographic category.

The observed result supports the use of organization-wide interventions rather than limiting communication or improvement programs to one gender, age group, department, educational level, or experience category. That said, the absence of statistically significant differences does not mean that every group had identical individual experiences.

Improvement Priorities Identified by Respondents

The most frequently selected priorities were coverage limits and the speed of medical approvals, each selected by 34 respondents. Clarity of policy terms and exclusions was selected by 32 respondents, while handling inquiries and complaints and fraud-prevention controls were each selected by 28 respondents.

An equal number of respondents indicated that no major improvement was required, showing that employee experiences were not uniform.

Open-ended responses also emphasized faster responses, shorter waiting times, improved digital services, additional staffing, and better facilities.

These results are consistent with the item-level results. Provider accessibility, understanding exclusions, complaint handling, and approval effectiveness received some of the lowest mean scores. The agreement between the quantitative items and improvement priorities strengthens the practical relevance of these areas.

Reliability and Interpretation of the Findings

A major result of the statistical analysis was the low internal consistency of all principal scales. Cronbach's Alpha was 0.111 for health-insurance benefits, 0.067

for psychological stability, 0.215 for insurance awareness, 0.059 for responsible healthcare use, and 0.050 for fraud prevention and monitoring. All coefficients were substantially below the commonly accepted threshold of 0.70.

This observation suggests that the items grouped under each scale may have measured several different ideas rather than one coherent construct. For example, the medical insurance scale included coverage, provider access, approvals, policy clarity, complaint handling, and satisfaction. These dimensions are related, but they may not form one statistically consistent measure.

Similarly, the psychological-stability scale combined financial security, anxiety, emotional reassurance, organizational care, work focus, approval-related stress, and coverage uncertainty. These items may require separation into more specific dimensions.

The low reliability limits the strength of all conclusions based on composite scores. On this basis, supported and unsupported hypotheses should be described as exploratory findings. The statistical evidence should not be presented as definitive confirmation or rejection of the theoretical relationships.

Overall Discussion

The descriptive findings reported that employees' evaluations of all major dimensions were close to neutral. Employees did not express strong overall satisfaction with the employer medical-insurance scheme, but they also did not demonstrate strong overall dissatisfaction.

Most proposed statistical relationships were not supported. Medical insurance benefits did not significantly predict psychological stability, coverage adequacy was not significantly associated with psychological stability or satisfaction, utilization frequency was unrelated to misuse risk, and perceived fraud-prevention procedures did not significantly reduce misuse risk.

The only statistically significant finding was the negative relationship between insurance awareness and misuse risk. Employees reporting higher awareness also reported lower misuse-risk scores. That outcome was confirmed in the regression model, although the explanatory power was limited and scale reliability was weak.

The analysis therefore suggests that employee awareness may represent a more immediate and measurable behavioral factor than general perceptions of benefits or monitoring. Even so, the findings also demonstrate the need for a revised measurement instrument before firm theoretical conclusions can be made.

Research Recommendations

Based on the findings of the study, the following recommendations are proposed.

1. Develop a Comprehensive Insurance-Awareness Program

The company should implement a structured and continuous awareness program explaining:

- Covered and non-covered medical services.
- Prior-authorization requirements.
- Approved healthcare-provider networks.
- Insurance-card use.
- Claim and approval procedures.
- Benefit limits.
- Employee rights and responsibilities.
- Behaviors that may constitute misuse or fraud.

This recommendation is directly supported by the significant negative relationship between insurance awareness and misuse risk.

The program should not depend only on providing employees with a lengthy policy document. Information should be communicated through orientation

sessions, short digital guides, frequently asked questions, periodic reminders, and accessible employee-support channels.

2. Clarify Policy Terms and Exclusions

The organization, insurance broker, and insurance provider should simplify the language used to explain benefit limits, exclusions, provider restrictions, medication coverage, and approval requirements.

Employees should receive clear examples showing when prior approval is required and why a service might be rejected. This recommendation addresses the relatively low awareness of exclusions and the priority employees assigned to policy clarity.

3. Improve the Speed and Transparency of Medical Approvals

The company should work with the insurer and insurance broker to review approval turnaround times and identify the causes of unnecessary delays.

Clear service-level standards should be developed for:

- Routine approvals.
- Urgent medical requests.
- Medication approvals.
- Hospital procedures.
- Appeals and rejected claims.

Employees should be able to track the status of their requests and receive clear explanations when additional documents are required.

4. Expand and Optimize the Approved Provider Network

Provider accessibility received the lowest mean within the medical insurance-benefits dimension. The organization should therefore assess whether the approved network adequately serves employees in different geographical locations.

The review should examine:

- Distance from employees' homes or workplaces.
- Availability of required specialties.
- Appointment waiting times.
- Pharmacy access.
- Emergency services.
- Hospital quality.
- Regional coverage.

The objective should not be to increase the number of providers only, but to ensure that approved providers are practically accessible and capable of meeting employees' healthcare needs.

5. Strengthen the Handling of Insurance Inquiries and Complaints

A clear support channel should be established for employees who require clarification or assistance with rejected claims, delayed approvals, provider problems, or policy conditions.

The channel may include a dedicated email address, digital portal, telephone service, or designated insurance coordinator. Requests should be recorded, classified, and followed until resolution.

The company should monitor response time, resolution rate, repeated complaints, and employee satisfaction with the support process.

6. Apply Risk-Based Fraud Monitoring

The organization should strengthen claims monitoring without treating frequent healthcare use as automatic evidence of fraud.

Monitoring should consider:

- Duplicate claims.
- Unusual claim combinations.
- Repeated use of identical services.
- Identity or insurance-card inconsistencies.
- Provider-related patterns.
- Services inconsistent with clinical records.
- Sudden unexplained changes in utilization.

Automated alerts should be treated as indicators for further examination rather than final proof of misconduct. Claims analysis should be combined with clinical review, policy verification, and fair investigation procedures.

7. Protect Legitimate Healthcare Access

Fraud-prevention procedures should not create unnecessary barriers for employees with genuine medical needs.

Employees with chronic illnesses, pregnancy-related care, rehabilitation requirements, or regular medication needs may have high utilization levels for legitimate reasons. Controls should therefore distinguish between medically justified high utilization and intentional deception.

The organization should communicate clearly that the purpose of monitoring is to protect the sustainability of the insurance program, not to discourage employees from seeking necessary care.

8. Establish a Confidential Reporting Mechanism

Employees should have access to a confidential and clearly communicated method for reporting suspected misuse, provider misconduct, insurance-card sharing, false claims, or other irregular practices.

The reporting mechanism should include:

- Protection of confidentiality.
- Clear procedures for handling reports.
- Protection against unfair retaliation.
- Professional investigation.
- Documentation of decisions.
- Fair treatment of all involved parties.

9. Monitor the Insurance Program Through Key Performance Indicators

The company should develop a periodic insurance dashboard containing indicators such as:

- Average approval time.
- Claim-rejection rate.
- Appeal success rate.
- Number of complaints.
- Complaint-resolution time.
- Provider-network accessibility.
- Employee awareness levels.
- Utilization patterns.
- Confirmed irregular claims.
- Employee satisfaction.

These indicators should be reviewed jointly by human resources, the insurance broker, the insurer, and relevant organizational decision-makers.

10. Provide Additional Psychological Support

Medical insurance should be treated as one component of employee well-being rather than the only factor influencing psychological stability.

The organization should also consider:

- Employee-assistance services.
- Confidential psychological counselling.
- Stress-management programs.
- Workload assessment.
- Supervisor support.
- Flexible procedures for employees experiencing serious health conditions.

This recommendation is important because the study did not find that medical insurance benefits alone significantly predicted psychological stability.

11. Revise the Questionnaire Before Future Use

The current questionnaire should not be reused without substantial revision because all principal scales demonstrated unacceptable internal consistency.

The revision should include:

- Reducing the number of concepts measured within each scale.
- Separating coverage, access, administration, and satisfaction into distinct dimensions.
- Separating financial security, anxiety, emotional stability, and perceived organizational support.
- Increasing the number of coherent items measuring awareness and misuse risk.
- Avoiding ambiguous or double-barrelled statements.

- Reviewing negatively worded items carefully.
- Using previously validated measurement scales where possible.
- Conducting cognitive interviews with employees.

12. Conduct a Stronger Pilot Study

The revised questionnaire should be tested on a pilot sample before the main study.

The pilot analysis should include:

- Item-total correlations.
- Cronbach's Alpha.
- McDonald's Omega.
- Exploratory factor analysis.
- Assessment of missing responses.
- Review of completion time.
- Employee feedback on clarity.

Items that do not contribute to a coherent construct should be modified or removed before the final survey.

13. Use Objective Claims Data in Future Research

Future studies should combine employee questionnaires with anonymized claims information, where ethical and organizational approval can be obtained.

Claims information may include:

- Number of healthcare visits.
- Types of services used.
- Repeated procedures.
- Approval and rejection patterns.
- Provider-level patterns.

- Confirmed irregular claims.

Combining perceptual and objective data would provide a stronger basis for examining the relationship between insurance benefits, health-service use, and fraud prevention.

14. Use a Longitudinal or Mixed-Methods Design

A future study should collect data at more than one point in time to determine whether changes in coverage, awareness, provider access, or approval procedures are followed by changes in psychological stability or responsible utilization.

Qualitative interviews or focus groups may also explain why employees provided neutral responses and identify specific experiences that cannot be captured through closed-ended statements.

15. Expand the Study to Other Organizations

The study was conducted within one pharmaceutical company. Future research should include several pharmaceutical or private-sector organizations in different Saudi regions.

A broader sample would improve generalizability and allow comparisons according to:

- Company size.
- Insurance provider.
- Coverage category.
- Region.
- Employee income.
- Type of work.
- Availability of dependants' coverage.

16. Implement Organization-Wide Improvements

Because no statistically significant differences were found according to gender, age, education, department, or work experience, awareness and insurance-improvement programs should be implemented across the organization.

General interventions can be supplemented with additional support for employees with complex medical needs, but the main communication program should not be limited to one demographic group.

17. Evaluate Recommendations After Implementation

After implementing the recommended changes, the organization should conduct a follow-up evaluation to measure:

- Improvement in policy understanding.
- Changes in approval time.
- Changes in complaint levels.
- Changes in provider accessibility.
- Employee satisfaction.
- Responsible utilization.
- Confirmed fraud or misuse indicators.

The evaluation should compare results before and after implementation to determine whether the interventions produced meaningful improvements.

References

- Al-Hanawi, M. K., Alsharqi, O., Almazrou, S., & Vaidya, K. (2018). Healthcare finance in the Kingdom of Saudi Arabia: A qualitative study of householders' attitudes. *Applied Health Economics and Health Policy*, 16, 55–64.
- Al-Hanawi, M. K., Mwale, M. L., & Kamninga, T. M. (2020). The effects of health insurance on health-seeking behaviour: Evidence from the Kingdom of Saudi Arabia. *Risk Management and Healthcare Policy*, 13, 595–607.
- Almalki, M., Fitzgerald, G., & Clark, M. (2011). Health care system in Saudi Arabia: An overview. *Eastern Mediterranean Health Journal*, 17(10), 784–793. <https://doi.org/10.26719/2011.17.10.784>
- Association of Certified Fraud Examiners. (2022). Occupational fraud 2022: A report to the nations.
- Bakker, A. B., & Demerouti, E. (2017). Job demands–resources theory: Taking stock and looking forward. *Journal of Occupational Health Psychology*, 22(3), 273–285. <https://doi.org/10.1037/ocp0000056>
- Burns, M. E., & Wolfe, B. L. (2016). The effects of the Affordable Care Act adult dependent coverage expansion on mental health. *The Journal of Mental Health Policy and Economics*, 19(1), 3–20.
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications.
- Du Preez, A., Bhattacharya, S., Beling, P., & Bowen, E. (2025). Fraud detection in healthcare claims using machine learning: A systematic review. *Artificial Intelligence in Medicine*, 160, 103061.
- Einav, L., & Finkelstein, A. (2018). Moral hazard in health insurance: What we know and how we know it. *Journal of the European Economic Association*, 16(4), 957–982.

Hong, Y.-H., Ford, M. T., & Jong, J. (2024). Employee benefit availability, use, and subjective evaluation: A meta-analysis of relationships with perceived organizational support, affective organizational commitment, withdrawal, job satisfaction, and well-being. *Journal of Applied Psychology*, 109(12), 1921–1947.

Joudaki, H., Rashidian, A., Minaei-Bidgoli, B., Mahmoodi, M., Geraili, B., Nasiri, M., & Arab, M. (2015). Using data mining to detect health care fraud and abuse: A review of literature. *Global Journal of Health Science*, 7(1), 194–202.

Kurtessis, J. N., Eisenberger, R., Ford, M. T., Buffardi, L. C., Stewart, K. A., & Adis, C. S. (2017). Perceived organizational support: A meta-analytic evaluation of Organizational Support Theory. *Journal of Management*, 43(6), 1854–1884.

Mukhopadhyay, S. (2026). Health insurance premium and psychological distress: Evidence from the ARPA enhanced subsidies. *Stress and Health*, 42(2), e70176.

Nabrawi, E., & Alanazi, A. (2023). Fraud detection in healthcare insurance claims using machine learning. *Risks*, 11(9), 160.

Ogbonnaya, C., Tillman, C. J., & Gonzalez, K. (2018). Perceived organizational support in health care: The importance of teamwork and training for employee well-being and patient satisfaction. *Group & Organization Management*, 43(3), 475–503.

Rashidian, A., Joudaki, H., & Vian, T. (2012). No evidence of the effect of interventions to combat health care fraud and abuse: A systematic review of literature. *PLOS ONE*, 7(8), e41988.

Rhoades, L., & Eisenberger, R. (2002). Perceived organizational support: A review of the literature. *Journal of Applied Psychology*, 87(4), 698–714.

Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education*, 2, 53–55.
<https://doi.org/10.5116/ijme.4dfb.8dfd>

Villegas-Ortega, J., Bellido-Boza, L., & Mauricio, D. (2021). Fourteen years of manifestations and factors of health insurance fraud, 2006–2020: A scoping review. *Health & Justice*, 9, 26.

Wells, K. B., Manning, W. G., & Valdez, R. B. (1989). The effects of insurance generosity on psychological distress and psychological well-being. *Archives of General Psychiatry*, 46(4), 315–320.

Weziak-Bialowolska, D., Lee, M. T., Cowden, R. G., Bialowolski, P., Chen, Y., VanderWeele, T. J., & McNeely, E. (2023). Psychological caring climate at work, mental health, well-being, and work-related outcomes: Evidence from a longitudinal study and health insurance data. *Social Science & Medicine*, 323, 115841.

World Health Organization. (2022). *World mental health report: Transforming mental health for all*.