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EVALUATING FACTORS INFLUENCING MEDICAL CHECKUP ADHERENCE IN PUBLIC SECURITY PERSONNEL USING IMPORTANCE-PERFORMANCE MAPPING (IPMA) METHOD

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A R T I C L E I N F O

Keywords: Medical checkup adherence, Public security personnel, Healthcare delivery, Importance-Performance Mapping Analysis (IPMA), PLS-SEM

Kata Kunci: Kepatuhan pemeriksaan kesehatan, personel keamanan publik, penyediaan layanan kesehatan, Analisis Pemetaan Penting-Kinerja (IPMA), PLS-SEM

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Abstract. *This study analyzing factors influencing adherence to medical checkups among public security personnel, focusing on variables such as Quality of Healthcare Delivery (QHD), Quality of Healthcare Personnel (QHP), Adequacy of Healthcare Resources (AHR), and Quality of Administrative Process (QAP), along with the mediating roles of Quality of Healthcare Environment (QHE) and Patient Satisfaction. A cross-sectional survey method was deployed, involving 185 respondents from security institutions who have experience undergo medical check-up in the institution clinics. Data analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) and Importance-Performance Mapping Analysis (IPMA). The study found that QHD and QHP were the most importance factors of medical checkup adherence, while AHR and QAP had moderate importance. IPMA results revealed that, while healthcare delivery performed well and should be maintained, personnel quality needed improvement to boost adherence rates.*

Abstrak. Studi ini menganalisis faktor-faktor yang memengaruhi kepatuhan pemeriksaan kesehatan di antara personel keamanan publik, dengan fokus pada variabel-variabel seperti Kualitas Pemberian Layanan Kesehatan (QHD), Kualitas Personel Layanan Kesehatan (QHP), Kecukupan Sumber Daya Layanan Kesehatan (AHR), dan Kualitas Proses Administratif (QAP), beserta peran mediasi Kualitas Lingkungan Layanan Kesehatan (QHE) dan Kepuasan Pasien. Metode survei cross-sectional digunakan, yang melibatkan 185 responden dari berbagai lembaga keamanan, dianalisis menggunakan Partial Least Squares Structural Equation Modeling (PLS-SEM) dan Importance-Performance Mapping Analysis (IPMA). Studi ini menemukan bahwa QHD dan QHP merupakan prediktor penting yang kuat dari kepatuhan pemeriksaan kesehatan, sementara AHR dan QAP memiliki tingkat kepentingan yang moderate. rendah. Hasil IPMA mengungkapkan bahwa, meskipun pemberian layanan kesehatan berjalan dengan baik dan harus dipertahankan, kualitas personel memerlukan peningkatan untuk meningkatkan tingkat kepatuhan.

INTRODUCTION

Adherence to medical checkups is crucial for the health management including security personnel, who face physically and mentally demanding job conditions. (Sips et al., 2023). Regular medical assessments are essential for early detection of potential health issues and to ensure the fitness and well-being of these workers. Despite the clear benefits, adherence rates to medical checkups within security institutions remain inconsistent, raising concerns about the effectiveness of current health management systems (Marins et al, 2019). Poor adherence can lead to undetected health problems, reduced job performance, and increased risks for both personnel and the communities they serve (Kengne et al., 2023). Thus, identifying and addressing factors that influence adherence to medical checkups within security institutions is critical.

Several studies have identified various factors influencing medical checkup adherence, including the quality of healthcare delivery, personnel, and resources. Recent research highlights that efficient, accessible, and comprehensive healthcare services are key to improving adherence in medical checkups (Mosadeghrad, 2014). The skills, engagement, and professionalism of healthcare personnel have been directly linked to patient satisfaction and compliance, further emphasizing their critical role in adherence improvement (Pomytkina & Glavatskikh, 2023). Adequate healthcare resources, such as medical equipment and facilities, also significantly influence adherence to health programs by either facilitating or hindering their effectiveness (Hamine et al., 2015). Additionally, administrative processes, including efficient scheduling and proper communication, impact adherence by ensuring personnel attend required checkups as scheduled (Oshio et al., 2023). However, there remains a gap in the literature regarding how these factors interact within public security institutions, particularly concerning the mediating roles of the healthcare environment and patient satisfaction. Further research in these areas could provide more comprehensive solutions to improving adherence rates among security personnel.

Many studies have explored individual factors impacting medical checkup adherence, but comprehensive analyses that examine how multiple institutional factors—such as healthcare delivery, personnel quality, resources, and administrative processes—collectively affect adherence remain limited (Amankwah et al., 2023). Furthermore, the role of the healthcare environment and patient satisfaction as mediators has not been thoroughly investigated (Alkazemi et al., 2019). Despite the presence of high-quality healthcare delivery systems, if the healthcare environment is perceived as unwelcoming, it can compromise adherence (Berglund et al., 2019). Understanding the mediating role of patient satisfaction is critical, as it often results from the interplay of multiple factors and can guide institutions in implementing targeted interventions to improve adherence (AlOmari & A. Hamid, 2022).

This study aims to address gaps in understanding the factors that improve healthcare management in public security institutions. Due to the physically and mentally demanding nature of public security work, regular health monitoring is crucial for maintaining personnel fitness (Morar et al., 2022). Enhancing adherence to medical checkups is vital not only for the individual health of security officers but also for the overall operational effectiveness and safety of security institutions (Maggio et al., 2023). Considering the resource constraints and unique job requirements in this sector, identifying the critical factors influencing adherence and evaluating their current effectiveness is essential for improving health outcomes (Kalantzi et al., 2023). To that end this study carried out at clinics managed by law enforcement institutions in Indonesia where input regarding clinical services is provided by officers or security personnel.

This research examines four crucial independent variables: Quality of Healthcare Delivery (QHD), Quality of Healthcare Personnel (QHP), Adequacy of Healthcare Resources (AHR), and Quality of Administrative Process (QAP), and explores the mediating effects of the Quality of Healthcare Environment (QHE) and Patient Satisfaction. The study employs Partial Least Squares Structural Equation Modeling (PLS-SEM) and Importance-Performance Mapping Analysis (IPMA) to identify factors that are both important but underperforming and those that are important and performing well, providing a framework for targeted improvements (Hair et al., 2024). This approach allows organizations to focus resources on enhancing underperforming factors while maintaining the strengths of well-performing variables (Ringle & Sarsted, 2016). The IPMA method has been used effectively in studies related to health service organizations (Setiawan & Antonio, 2023).

The findings of this study contribute to healthcare management within public security institutions by pinpointing underperforming areas, thereby allowing institutions to prioritize improvements in medical checkup adherence. Such enhancements are likely to lead to better health outcomes for security personnel and provide actionable insights for healthcare managers and policymakers aiming to optimize healthcare delivery in high-stress environments. Moreover, this research offers an insight applicable to other high-risk professions, where regular medical checkups are critical to maintaining the health and performance of the workforce.

THEORETICAL BACKGROUND

In examining the factors that influence adherence to medical checkups in public security personnel, the Health Belief Model (HBM), and Donabedian's Quality of Care model (1988) provide a robust framework for understanding how perceptions of healthcare quality, satisfaction, and organizational structures affect behavior. These theories underpinning concept to explore how the quality of healthcare delivery, personnel, resources, and administrative processes impact the healthcare environment, patient satisfaction, and adherence to medical checkups (Li et al., 2021). This study argues that Quality of Healthcare Delivery (QHD), Quality of Healthcare Personnel (QHP), Adequacy of Healthcare Resources (AHR), Quality of Administrative Process (QAP) positively influences the Quality of Healthcare Environment (QHE). These factors of healthcare delivery ensures that healthcare services are reliable and efficient, contributing to a better healthcare environment. Furtherly, Quality of Healthcare Delivery (QHD) positively influences Patient Satisfaction (PS). Efficient and patient-centered healthcare delivery increases patient trust and satisfaction (Hong & Oh, 2019). Quality of Healthcare Personnel (QHP) positively influences Patient Satisfaction (PS). Healthcare personnel who are knowledgeable, approachable, and empathetic enhance patient satisfaction (Moya-Salazar et al., 2023). When personnel perceive that sufficient healthcare resources are available, they are more likely to be satisfied with their healthcare experience. Patient Satisfaction (PS) positively influences Adherence to Medical Checkups (AMC). Satisfied patients are more likely to adhere to medical checkups, trusting the healthcare system and its ability to meet their needs. Quality of Healthcare Environment (QHE) positively influences Adherence to Medical Checkups (AMC). A comfortable, well-organized, and resource-rich healthcare environment encourages adherence by reducing psychological and logistical barriers (Kvarnström et al., 2021).

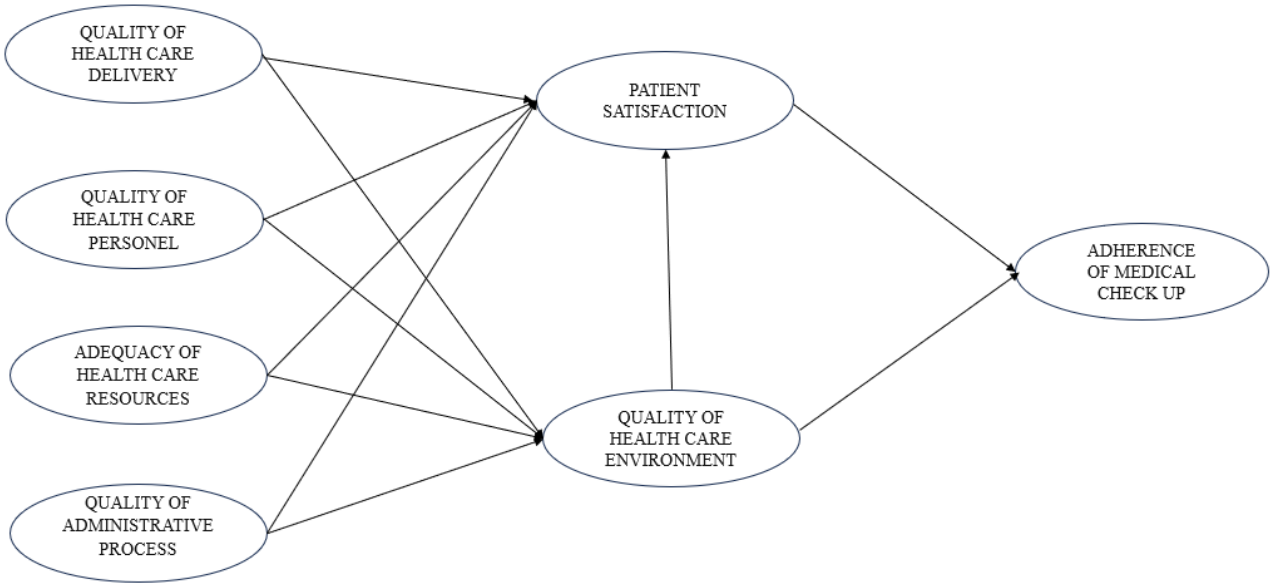

Figure 1. Conceptual Framework

METHODS

Questionnaire Design and Data Collection

A cross-sectional survey was conducted among officer or public security personnel in Jakarta. who has undergone a medical checkup at the clinic in the last one year. The survey was carried out using a self-administered questionnaire instrument in March 2024. The minimum number of respondents for this research was obtained using power analysis, where 154 samples were required but the actual number was 185 respondents. Meanwhile, the sampling technique is purposive sampling with a number of inclusive criteria.

A structured questionnaire was divided into six sections, measuring the main variables: Quality of Healthcare Delivery (QHD), Quality of Healthcare Personnel (QHP), Adequacy of Healthcare Resources (AHR), Quality of Administrative Process (QAP), Quality of Healthcare Environment (QHE), and Patient Satisfaction. Items were adapted from scales validated in previous healthcare studies and measured on a five-point Likert scale (1 = strongly disagree, 5 = strongly agree) (Fowler, 2014). A total of 185 respondents completed the survey, meeting the minimum requirements for PLS-SEM analysis.

Data Analysis

The data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) due to its capability to handle complex models and offer advance analytic such as IPMA analysis (Hair et al., 2019). Convergent and discriminant validity were assessed using criteria such as Composite Reliability (CR), Cronbach's Alpha, and the Average Variance Extracted (AVE), which are standard metrics for evaluating the reliability and validity of measurement models. Furthermore, Importance-Performance Mapping Analysis (IPMA) was employed to evaluate the significance and performance of each variable in predicting adherence to medical checkups (Teeluckdharry et al., 2022). Importance-Performance Map Analysis (IPMA) in PLS-SEM is an effective method for

gaining management insights because it combines both importance and performance metrics. It helps identify critical areas where improvements can have the most significant impact on overall outcomes (Ringle & Sarsted, 2016).

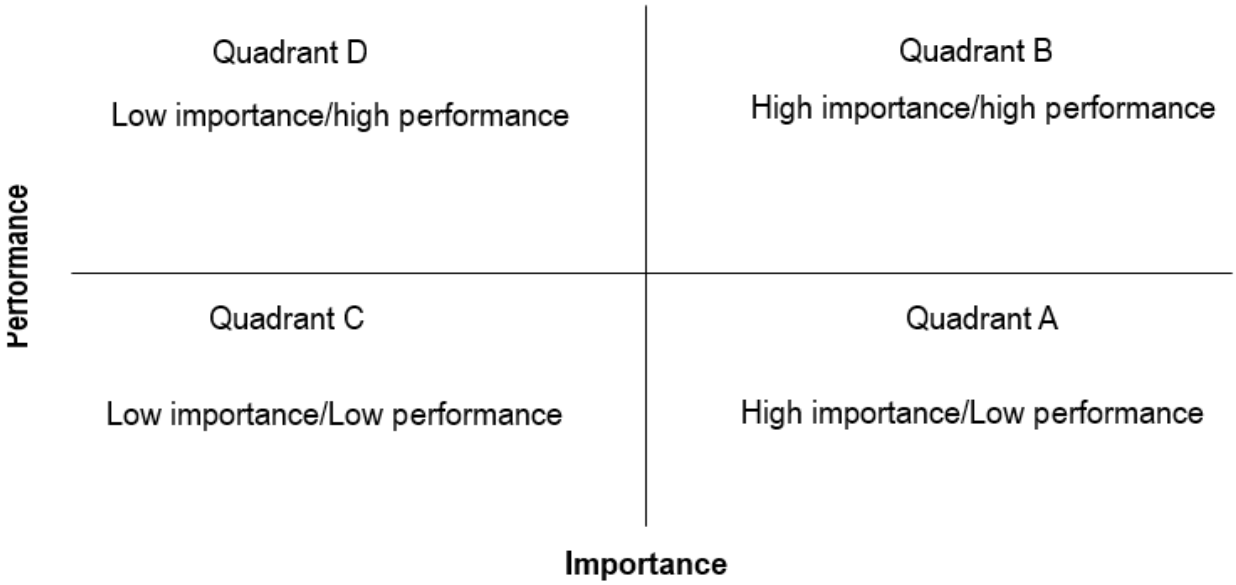

Figure 2. Four Quadrants of IPMA

In Figure 2 above it can be seen the division of quadrants in the mapping of the constructs and indicators that will be obtained from PLS-SEM. By mapping variables into four quadrants, managers can focus on enhancing areas with high importance but low performance. This targeted approach optimizes resource allocation and strategic decision-making.

RESULTS

Sample Characteristics

Table 1 presents the demographic characteristics of the respondents. The sample comprised mostly male security personnel (56%), with the majority being over 40 years old (47%).

Table 1. Demographic Characteristics of the Respondents

Description	Category	Total (n)	Percentage (%)
Gender	Male	103	56
	Female	82	44
	Total	185	100
Age	< 30 years	26	14
	30-40 years	72	39
	> 40 years	87	47
	Total	185	100

Structural Model Testing

The PLS-SEM results in this study was done through SmartPLS.4. software. Convergent validity was achieved with AVE values above 0.5 for all constructs. Reliability was confirmed with Cronbach's Alpha values greater than 0.7.

Table 2. Construct Validity and Reliability

Variable	Code	OL	Indicator Item	CA	CR	AVE
Adequacy of Healthcare Resources (AHR)	AHR1	0.931	In my opinion, the completeness of the Medical Checkup medical equipment is quite complete.	0.881	0.916	0.734
	AHR2	0.860	In my opinion, the number of rooms for the Medical Checkup examination is sufficient			
	AHR3	0.878	In my opinion, the number of doctors who carry out medical checkups is sufficient			
	AHR4	0.747	In my opinion, the sufficiency of nurses who carry out Medical Checkups per day is met			
			Mean= 3.996; CA= 0,881; Rho a= 0,928; Rho c= 0,916; AVE= 0,734			
Adherence of Medical Checkup	ADH1	0.786	In my opinion, the results of the Medical Checkup are beneficial to my health	0.867	0.910	0.717
	ADH2	0.829	In my opinion, psychological commitment is very necessary to motivate me to take the Medical Checkup			
	ADH3	0.917	In my opinion, it is important to socialize the Medical Checkup examination to other Security officers			
	ADH4	0.849	In my opinion, the existence of a Medical Checkup motivates me to maintain and care for my health			
			Mean= 3.781; CA=0,867; Rho a= 0,873; Rho c= 0,910; AVE= 0,717			
Quality of Healthcare Environment	CAC1	0.771	In my opinion, the Medical Checkup place has sufficient lighting both day and night	0.876	0.901	0.505
	CAC2	0.673	In my opinion, the lighting and also the dental unit lights during the Medical Checkup examination do not interfere with my vision			

Variable	Code	OL	Indicator Item	CA	CR	AVE
	IAP1	0.615	I feel the interior around the Medical Checkup place is comfortable			
	IAP3	0.604	I think the interior of the Medical Checkup place is clean			
	LOP1	0.586	I think that access to the Medical Checkup location is easy			
	PCD1	0.770	In my opinion, during the Medical Checkup my privacy is guaranteed			
	PCD2	0.805	In my opinion, I can have private conversations during the Medical Checkup			
	VNO1	0.743	In my opinion, the scenery around the Medical Checkup place is calming			
	VNO2	0.787	In my opinion, I am free to choose the Medical Checkup flow			
			Mean= 4.038; CA=0,876; Rho a= 0,889; Rho c= 0,901; AVE= 0,505			
Patient Satisfaction	PATSAF1	0.623	I am satisfied with the Medical Checkup service procedure	0.886	0.922	0.751
	PATSAF2	0.941	I feel that the requirements that must be met to take part in the Medical Checkup are not complicated.			
	PATSAF3	0.923	In my opinion, the Medical Checkup Officer provided clear information regarding the type of Medical Checkup.			
	PATSAF4	0.938	In my opinion, the Medical Checkup officers are very responsible for implementing the Medical Checkup.			
			Mean= 3.330; CA=0,886; Rho a= 0,946; Rho c= 0,922; AVE= 0,751			
Quality of Administrative Process (QAP)	QAP1	0.853	In my opinion, the results of the Medical Checkup were received in approximately four days.	0.857	0.902	0.700
	QAP2	0.909	In my opinion, the Medical Checkup registration process is fast (less than 15 minutes)			
	QAP3	0.881	I feel that the process of filling in the biodata for the Medical Checkup is not complicated.			
	QAP4	0.687	According to my observations, the time needed to carry out a Medical Checkup is around 30 minutes.			

Variable	Code	OL	Indicator Item	CA	CR	AVE
			Mean= 3.885; CA=0,857; Rho a= 0,914; Rho c= 0,902; AVE= 0,700			
Quality of Healthcare Delivery (QHD)	QHD1	0.871	In my opinion, it is easy for me to get information about the implementation of Medical Checkups at the Security Officer Institution Clinic.	0.863	0.908	0.714
	QHD2	0.924	In my opinion, the time I spent to do a Medical Checkup at the Security Officer Institution Clinic were quite efficient.			
	QHD3	0.707	In my opinion, the Medical Checkup Schedule set by the Security Officer Institution Clinic is in accordance with my time availability as a Security Officer.			
	QHD4	0.863	In my opinion, doctors who perform medical checkups have extensive knowledge of the science they possess.			
			Mean= 4.122; CA=0,863; Rho a= 0,884; Rho c= 0,908; AVE= 0,714			
Quality of Healthcare Personnel (QHP)	QHP1	0.752	In my opinion, the Medical Checkup officers at the Security Officer Institution Clinic are friendly.	0.792	0.864	0.615
	QHP2	0.812	In my opinion, the Medical Checkup officer at the Security Officer Institution Clinic is polite.			
	QHP3	0.704	In my opinion, the doctors who carry out the Medical Checkup examination are willing to listen to the complaints of the Medical Checkup participants.			
	QHP4	0.859	In my opinion, the nurses are willing to listen to the complaints of the Medical Checkup participants.			
			Mean= 3.191; CA=0,792; Rho a= 0,827; Rho c= 0,864; AVE= 0,615			

CA=Cronbach Alpha, AVE=Average Variance Extracted

Table 2 shows the mandatory first step to test the measurement model by the indicator item reliability and validity to further explained adherence to medical checkups among security officers. The findings indicate that the completeness of medical equipment and the availability of healthcare personnel enhance participants' adherence, supported by high reliability scores where CA, Rho_a and Rho_c (Composite Reliability) found > 0.7. Moreover, gained satisfactory in validity test

(AVE> 0.5). Based on this finding it could be said that the model has reliable and valid indicators to measure all the construct within the model.

Table 3. Discriminant validity HTMT ratio

Variable	AHR	ADH	QHE	PATSAF	QAP	QHD	QHP
AHR							
ADH	0,630						
QHE	0,665	0,859					
PATSAF	0,563	0,670	0,636				
QAP	0,453	0,472	0,529	0,577			
QHD	0,540	0,696	0,751	0,636	0,370		
QHP	0,648	0,729	0,788	0,823	0,622	0,656	

From the HTMT (Heterotrait-Monotrait Ratio) in Table 3. the level of discriminant validity between the variables in the model, including the dependent variable Adherence of Medical Check-Up (ADH) well evaluated. HTMT is a measure used to ensure that different constructs (variables) are indeed measure differently by each indicator empirically. All HTMT Values in the table are found below the limit of 0.9 therefore this finding established the discriminant validity of the model.

Table 4. Q^2 predict

Variable	Q^2 predict
Adherence of Medical Checkup	0,505
Quality of Healthcare Environment	0,619
Patient Satisfaction	0,589

The R^2 value for Adherence to Medical Check-up was found to be 0.608, so the model is said to have adequate explanation. It is said that the variables in the model can explain 60% of the dependent variable The model prediction relevance was assessed by the Q^2_predict value. The three variables found has value more than 0.50, indicates that the model used has large predictive ability and can be relied on to predict Adherence of Medical Checkup, Quality of Healthcare Environment, and Patient Satisfaction.

From the outer model image provided, the dependent variable Adherence of Medical Check-Up shows that there is a fairly strong relationship with Health Care Environment (path coefficient = 0.599), which means that the better the quality of the health service environment, the higher the

officer's compliance with medical check-ups. In addition, Patient Satisfaction also mediates the relationship between independent variables such as Quality of Health Care Delivery (QHD) and Quality of Health Care Personnel (QHP) on Adherence of Medical Check-Up. This can be seen from the indirect relationship between QHD, QHP, and other variables through Patient Satisfaction and Health Care Environment. Overall, it can be said that service environment factors and patient satisfaction play an important role in influencing compliance of the routine health checks.

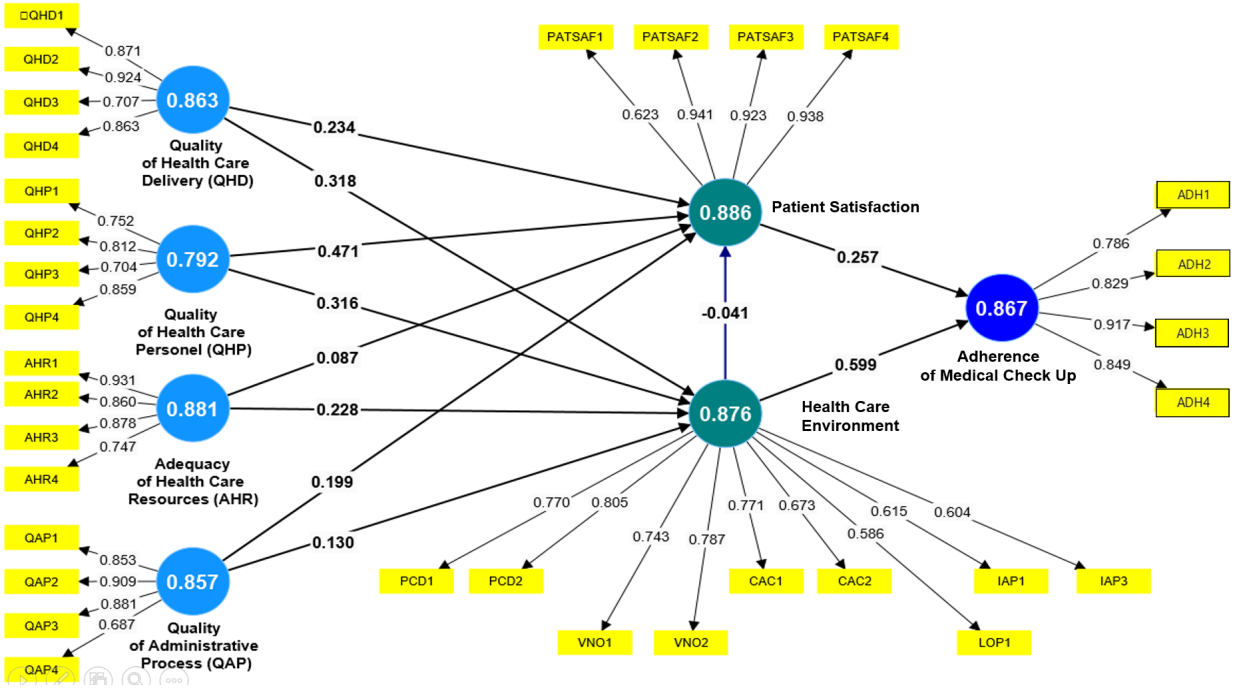

Figure 3. Outer Model

The Figure 3. shown a PLS-SEM model that explores the relationships between several independent variables and Adherence of Medical Check-Up, mediated by Patient Satisfaction and Health Care Environment. The independent variables include Quality of Health Care Delivery (QHD), Quality of Health Care Personnel (QHP), Adequacy of Health Care Resources (AHR), and Quality of Administrative Process (QAP), each measured by highly reliable indicators. The Health Care Environment shows a strong direct impact on Adherence to Medical Check-Up (path coefficient 0.599), highlighting the critical role of the healthcare environment in enhancing public security personnel's compliance with regular check-ups. Additionally, Patient Satisfaction serves as a key mediator, particularly influencing the relationship between QHD and QHP with medical check-up adherence (path coefficient 0.257). This suggests that higher satisfaction with healthcare services significantly boosts adherence to medical check-ups, emphasizing the need for continuous improvement in healthcare delivery and personnel quality.

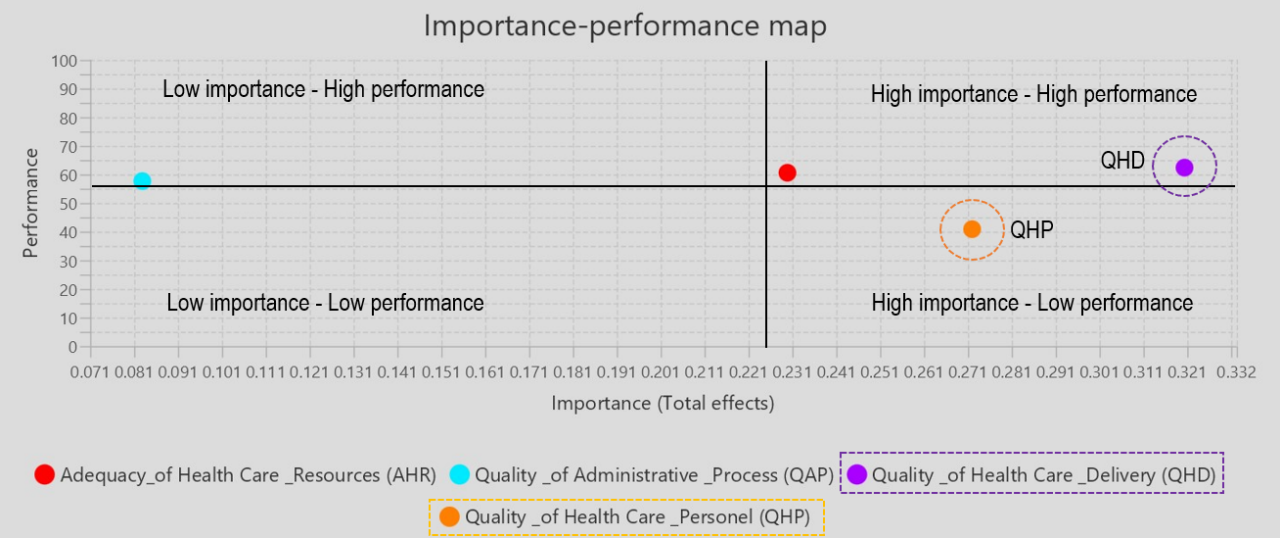

Figure 4. IPMA construct

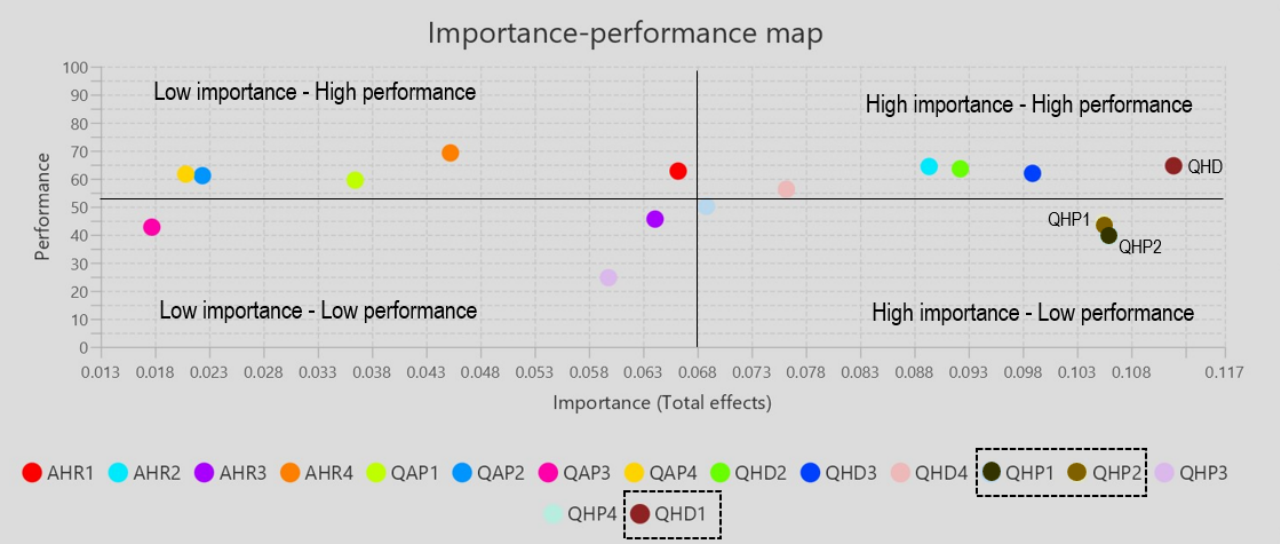

Figure 5. IPMA indicator

Table 5. Performance and Importance Score Results

Indicator	Importance	Performance	Variable	Importance	Performance
AHR1	0,067	62,703	Adequacy of Healthcare Resources (AHR)	0,230	60,581
AHR2	0,090	64,324			
AHR3	0,065	45,586			
AHR4	0,046	69,189			
QAP1	0,037	59,459		0,083	57,671
QAP2	0,023	61,081			

Indicator	Importance	Performance	Variable	Importance	Performance
QAP3	0,018	42,703	Quality of Administrative Process (QAP)		
QAP4	0,021	61,622			
QHD1	0,112	64,595	Quality of Healthcare Delivery (QHD)	0,320	62,369
QHD2	0,093	63,514			
QHD3	0,099	61,892			
QHD4	0,077	56,216			
QHP1	0,069	50,090	Quality of Healthcare Personnel (QHP)	0,272	40,875
QHP2	0,106	44,324			
QHP3	0,060	24,685			
QHP4	0,106	39,640			
Mean	0,068	54,476	Mean	0,226	55,374

IPMA Analysis

The Importance-Performance Map Analysis (IPMA) for the variable Adherence to Medical Checkups reveals valuable insights into areas that require either attention or continued focus. In the High Importance-High Performance quadrant, Quality of Healthcare Delivery (QHD) emerges as the most critical factor, demonstrating both high importance (0.320) and strong performance (62.369). This underscores that healthcare service quality is a major driver of medical checkup adherence among public security personnel, and the current performance in this area is commendable. To sustain these high levels of compliance, it is essential to prioritize efforts that maintain and further enhance the delivery of healthcare services. Ensuring continuous quality improvements in healthcare delivery will help reinforce personnel's commitment to regular medical checkups and maintain overall health (Komashie et al., 2021).

On the other hand, the High Importance-Low Performance quadrant highlights Quality of Healthcare Personnel (QHP) as the top priority for improvement. Although QHP has significant importance (0.272), its relatively low performance (40.875) reveals a critical gap in the role of healthcare staff in driving medical checkup adherence (Zhang & Johnson, 2023). Addressing this gap through improved training, engagement, and expertise of healthcare personnel could lead to substantial gains in adherence rates (McKinsey & Company, 2023). Meanwhile, Adequacy of Healthcare Resources (AHR), found in the Low Importance-High Performance quadrant, performs well (60.581) but is less crucial (importance: 0.230) for adherence. This suggests that while resources are sufficiently allocated, they may not be as impactful as other factors like personnel quality, making it worth reconsidering resource allocation. Lastly, Quality of Administrative Process (QAP) ranks as a low priority in the Low Importance-Low Performance quadrant, with minimal influence on medical checkup adherence, indicating that improvements in administrative processes may not significantly affect adherence outcomes.

Discussion

In this study, the results of the Importance-Performance Map Analysis (IPMA) reveal important insights into the factors influencing adherence to medical checkups among public security

personnel. One of the key findings is that Quality of Healthcare Delivery (QHD) plays a critical role, demonstrating both high importance and high performance, reinforcing its pivotal role in driving compliance. The findings of this study are generally consistent with previous research that quality of care can positively influence behavioral intention (Ricca & Antonio, 2021). This aligns with previous studies highlighting that efficient healthcare delivery, particularly in high-stress professions, significantly contributes to higher adherence rates by minimizing procedural delays and enhancing patient trust in medical services (López-Del-Hoyo et al., 2023). Enhancing this aspect further could continue to strengthen adherence and ensure long-term health outcomes for security personnel.

However, the Quality of Healthcare Personnel (QHP) presents a clear area for improvement, as it demonstrates high importance but low performance. This is particularly evident in the low scores for indicators such as healthcare personnel's responsiveness and willingness to listen, which aligns with prior research identifying personnel engagement as a key determinant of patient satisfaction and compliance (Kang et al., 2023). Addressing this gap through improved training programs and addressing these deficiencies could significantly boost the effectiveness of medical checkups, enhancing both the quality of care and adherence rates. In this context, previous research has shown the importance of encouraging caring behavior in medical personnel to increase patient satisfaction (Antonio et al., 2024).

Interestingly, the Adequacy of Healthcare Resources (AHR), while performing well, shows lower importance relative to Quality of Healthcare Delivery (QHD) and Quality of Healthcare Personnel (QHP). This suggests that while resource availability is necessary, it is not the primary driver of adherence, a finding consistent with other studies in healthcare management (Kengne et al., 2023). On the other hand, administrative processes, despite their lower overall importance, still present areas for efficiency improvements. Focusing on these lower-priority yet underperforming areas could provide additional support for maintaining high compliance with medical checkups, ensuring comprehensive and well-rounded healthcare support for public security officers.

The important findings of this research show that there are 2 indicators that are in the not yet performing quadrant but are considered the most important by respondents as in Figure 5, namely QHP1 "In my opinion, the Medical Checkup officers at the Security Officer Institution Clinic are friendly". Then QHP2 "In my opinion, the Medical Checkup officer at the Security Officer Institution Clinic is polite". The findings from the IPMA analysis reveal that while friendliness (QHP1) and politeness (QHP2) of medical check-up officers are considered highly important by respondents, they are not yet performing at the expected levels. This gap indicates a critical area for improvement in the clinic's service quality. From a managerial perspective, the clinic should prioritize training programs that focus on enhancing interpersonal skills, particularly in customer service, to ensure officers exhibit friendliness and politeness. Furthermore, implementing feedback systems to continuously monitor staff behavior could help maintain these standards. Improving these aspects will lead to greater patient satisfaction, trust, and overall performance of the clinic, which is vital for maintaining the health of law enforcement personnel who require optimal physical fitness to perform their duties.

Another important finding is that indicator I QHD1, namely "in my opinion, it is easy for me to get information about the implementation of Medical Checkups at the Security Officer Institution Clinic" is considered the most important and has performed well in the eyes of respondents. This suggests that the clinic's communication channels, whether through staff, digital platforms, or signage, are effective. To maintain and further leverage this strength, the clinic should continue to

invest in and possibly enhance its information systems, ensuring they remain user-friendly and up-to-date. Additionally, the clinic can explore expanding the use of digital tools, such as mobile apps or automated reminders, to provide even more personalized and real-time information. By sustaining this high performance in information accessibility, the clinic can strengthen patient trust and satisfaction, which are crucial for ensuring compliance with medical check-up schedules and maintaining the health of security personnel.

In this study, several limitations were also found, including that respondents were not separated based on rank or position. This may make a difference in assessing the service according to the individual's expectations. Furthermore, it has not been studied based on the history of illness or trauma that has been experienced. This grouping needs to be done in future studies so that it can provide deeper input. Likewise, the assessment of health workers such as doctors and nurses need to be differentiated.

Conclusion

A fit body and healthy mentality are important prerequisites for the success of law enforcement or security officers in carrying out their duties. For this reason, good health services and adherence to medical check-ups are vital. Study on health services in institutional clinics concludes that Adequacy of Healthcare Resources (AHR), while performing well, shows lower importance relative to Quality of Healthcare Delivery (QHD) and Quality of Healthcare Personnel (QHP). This suggests that while resource availability is necessary, it is not the primary driver of adherence. On the other hand, administrative processes, despite their lower overall importance, still present areas for efficiency improvements. Focusing on these lower-priority yet underperforming areas could provide additional support for maintaining high compliance with medical checkups, ensuring comprehensive and well-rounded healthcare support for public security officers.

Furthermore, although the Adequacy of Healthcare Resources (AHR) shows satisfactory performance, its lower relative importance suggests that investments in this area may yield diminishing returns compared to improvements in personnel and administrative efficiency). This study provides practical insights for healthcare administrators and policymakers, highlighting the need for a balanced approach that prioritizes the most impactful areas, such as healthcare personnel and delivery systems, to sustain and improve adherence to medical checkups in public security institutions

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