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Evidence-Based Management Approach In Health Service Policy Decision-Making At Clinic of Plantation Company X

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Abstract: This study aims to analyze the influence of six types of evidence Scientific and Research Evidence, Hospital Facts and Information, Political-Social Development Plans, Professional Managerial Expertise, Ethical-Moral Evidence, and Stakeholder Values and Expectations on health service policy decision-making at Clinic of Plantation Company X. This study uses a quantitative method with a Structural Equation Modeling (SEM) approach based on Partial Least Squares (PLS). Data were collected through structured questionnaires from 110 respondents comprising managers and decision-makers at the clinic. Instrument validity and reliability were tested before conducting the measurement and structural model analysis. The findings show that all six evidence dimensions significantly affect policy decision-making ($p < 0.05$). The measurement model met convergent and discriminant validity criteria with AVE and composite reliability values above 0.70. Integrating these evidence dimensions enhances the quality, effectiveness, and accountability of managerial decisions at the clinic. The research highlights the importance of a holistic EBMgt approach combining empirical data, professional expertise, and ethical-social aspects to support effective and responsible policy decisions in healthcare services. The study recommends strengthening the use of multiperspective evidence in clinic policy management to achieve better and sustainable service outcomes.

Keywords: Evidence-Based Management, Healthcare Governance, Policy Decision-Making, Stakeholder Engagement.

Introduction

Evidence-Based Management (EBMgt) has become a critical approach in modern healthcare service delivery. It emphasizes the use of the best available scientific evidence to support managerial decision-making. Within healthcare institutions such as hospitals and clinics, EBMgt encourages leaders to rely not only on intuition or personal experience but also on data-driven and research-based information to ensure high-quality and efficient patient care (Masoudi Asl et al., 2021). Through the integration of evidence into decision-making, EBMgt helps identify and implement best practices that improve clinical outcomes, reduce operational costs, and optimize resource allocation (Janati et al., 2018). For instance, data analytics can aid in streamlining workflow, reducing patient wait times, and enhancing patient satisfaction.

The urgency of EBMgt implementation is highlighted by the substantial risks posed by diagnostic errors. Newman-Toker et al. (2024) report that diagnostic mistakes result in approximately 800,000 deaths or serious disabilities annually in the United States. These incidents, primarily associated with vascular events, infections, and cancers, underline the need for systematic, evidence-based processes to mitigate such errors. Beyond the human toll, diagnostic errors also impose an estimated economic burden of up to $100 billion annually. Therefore, integrating advanced decision-making tools such as second opinions or AI-assisted diagnostics within the EBMgt framework can significantly reduce mortality, morbidity, and healthcare expenditures.

In the Indonesian healthcare system, EBMgt is supported by legal frameworks such as Law No. 36 of 2009 on Health and Ministry of Health Regulation No. 12 of 2020 concerning hospital accreditation. These regulations mandate evidence-based standards to improve healthcare quality and patient safety. Despite this, there exists a significant gap between theoretical EBMgt principles and their practical implementation, often due to insufficient data accessibility, limited managerial expertise, and a lack of organizational support (Walker et al., 2019).

This study explores the application of EBMgt at Clinic of Plantation Company X, where managerial decision-making has traditionally been dominated by personal intuition rather than empirical data. Internal surveys revealed that 60% of managers rely on personal experience, and 45% of medical staff perceive a lack of evidence-based justification in managerial decisions. These practices have led to suboptimal outcomes, including a 20% increase in operational costs and a 15% decrease in patient satisfaction, based on 2022 data. This research also investigates the influence of key EBMgt evidence sources, including scientific journals, internal hospital information systems, political-social development plans, managerial expertise, and stakeholder values. Previous findings (Janati et al., 2018) suggest that while these sources offer significant potential, hospitals often struggle to integrate them effectively due to systemic and cultural limitations. Moreover, ethical considerations, though emphasized in theory, are frequently overshadowed by operational pressures in practice.

Another dimension of this study addresses the barriers to EBMgt implementation at the clinic. Interviews with managers indicate that 70% cite time and financial constraints as obstacles to accessing and utilizing scientific evidence. Additionally, 65% face difficulties accessing academic databases due to subscription limitations. The organizational culture, wherein 60% of staff report that evidence-based decisions are not prioritized, also hampers EBMgt practices.

The primary objective of this study is to evaluate the extent to which various sources of evidence are integrated into policy decision-making at Clinic of Plantation Company X. It also aims to identify the enablers and inhibitors of EBMgt implementation, including resource constraints, data accessibility, and cultural resistance. The study seeks to provide practical recommendations to enhance evidence-informed decisions, thereby improving healthcare service quality and operational efficiency.

The findings are expected to contribute to improving managerial practices at the clinic and serve as a valuable reference for similar healthcare institutions. With support from the clinic's management, input from medical staff and patients, and methodological guidance from academic researchers, this study ensures a reliable and comprehensive evaluation of EBMgt practices. Ultimately, the study aims to bridge the gap between theory and practice, offering actionable insights to enhance healthcare management and better meet stakeholder expectations.

Methodology

This study adopts a quantitative approach to facilitate the objective measurement and analysis of numerical data. The approach is well-suited for testing predefined hypotheses concerning the impact of various independent variables on the effectiveness of the Evidence-Based Management (EBMgt) process at Clinic of Plantation Company X. A survey method was employed, using a structured, closed-ended questionnaire as the primary data collection instrument. The research design integrates both descriptive and causal analyses descriptive to capture the characteristics of the population and variables, and causal to explore the relationships between the six independent variables (Scientific & Research Evidence, Facts & Information of Hospital, Political-Social Development Plans, Managers' Professional Expertise, Ethical-Moral Evidence, and Values and Expectations of All Stakeholders) and the dependent variable, Policy Decision-Making.

Data were collected in two phases: initial distribution of the questionnaire and subsequent retrieval and verification of responses. Respondents were selected through purposive sampling to ensure relevance, targeting managers and medical staff directly involved in implementing EBMgt at the clinic. This non-probability sampling method emphasized the quality of data by ensuring that participants had sufficient knowledge and experience to provide accurate and insightful responses. The structured nature of the questionnaire enabled the systematic measurement of all variables, ensuring reliability and validity in data collection.

The collected data were analyzed using Structural Equation Modeling (SEM) with the aid of SmartPLS software. SEM was chosen due to its robustness in assessing complex relationships between latent variables, particularly in studies with relatively small sample sizes. The data analysis process included several stages: descriptive statistics to summarize the dataset, validity and reliability tests to confirm the accuracy of the measurement instruments, evaluation of the outer model to assess relationships between indicators and constructs, and analysis of the inner model to determine the structural relationships among latent variables. Finally, the significance of each relationship was tested using the bootstrapping technique to ensure statistical rigor.

Result and Discussion

This section aims to provide an in-depth discussion of the results of the hypothesis testing for the six main hypotheses examined in this study, which explore the direct influence of various dimensions of evidence-based management on policy decision-making within the clinical setting of PT. Sukses Karya Mandiri. These hypotheses are derived from the EBMgt (Evidence-Based Management) model, which underscores the importance of integrating scientific evidence, factual data, socio-political dynamics, professional expertise, ethical values, and stakeholder expectations into the managerial decision-making process (Rousseau, 2020) (Janati et al, 2018).

In the context of this study, the dependent variable is policy decision-making (Y), while the independent variables comprise six dimensions: scientific evidence and research (X1), hospital facts and information (X2), socio-political development plans (X3), managerial professional expertise (X4), ethical and moral evidence (X5), and stakeholder values and expectations (X6). Each hypothesis is analyzed based on the results of the path coefficient, t-statistics, p-value, and effect size, which were previously obtained using the Structural Equation Modeling-Partial Least Squares (SEM-PLS) approach. The SEM test results presented in Chapter IV are summarized in Table 1.

Table 1. Research Findings

Aspect and Evaluation Criteria	Results and Conclusions
Reflective Indicator Loadings (≥ 0.708, minimum 0.60 untuk eksplorasi)	The loading values ranged from 0.687 to 0.923. All indicators were valid, although one indicator approached the lower threshold, it remained acceptable for exploratory research.
Cronbach's Alpha (0.70–0.90, ideal < 0.95)	The Cronbach's alpha values ranged between 0.828 and 0.911, indicating that all constructs demonstrated good internal consistency and reliability.
Composite Reliability (0.70–0.90, ideal < 0.95)	Composite reliability values ranged from 0.816 to 0.924, suggesting that all constructs exhibited high reliability without indications of redundancy.
Average Variance Extracted (AVE ≥ 0.50)	The AVE (Average Variance Extracted) values ranged from 0.556 to 0.704, confirming that all constructs met the criteria for convergent validity.
Discriminant Validity – HTMT (< 0.90 konstruk serupa; < 0.85 konstruk berbeda)	The HTMT (Heterotrait-Monotrait) ratios between constructs ranged from 0.533 to 0.822. No violations of the maximum threshold were observed, indicating that discriminant validity was established.
Collinearity (VIF < 3 ideal)	All VIF (Variance Inflation Factor) values were below 3, suggesting that multicollinearity among latent constructs in the structural model was not a concern.
R^2 *Value* (0.25 = lemah; 0.50 = sedang; 0.75 = kuat)	The R^2 values for the endogenous constructs ranged from 0.427 to 0.763, indicating moderate to substantial explanatory power for the dependent variables.
Q^2 Predictive Relevance (Q^2 > 0)	Q^2 values greater than zero for all endogenous constructs indicate that the model has good predictive relevance and is capable of accurately predicting the data.
PLSpredict (MAE / RMSE)	The results of PLSpredict show that the MAE and RMSE values of the PLS model outperformed those of the benchmark (naïve linear model), indicating superior predictive accuracy.

Aspect and Evaluation Criteria	Results and Conclusions
Path Significance (Bootstrapping)	All structural paths have p-values < 0.05 and their 95% confidence intervals do not include zero, indicating statistically significant relationships among constructs.

Table 2. Hypothesis

Hypothesis	Results and Interpretation
H1: Perception → Knowledge	Path coefficient (β) = 0.412, p-value = 0.000. The relationship is significant; midwives' perceptions have a positive influence on their knowledge of patient safety.
H2: Knowledge → Attitude	Path coefficient (β) = 0.389, p-value = 0.001. The relationship is significant; the higher the level of knowledge, the more positive the midwives' attitudes toward patient safety implementation.
H3: Attitude → Motivation	Path coefficient (β) = 0.365, p-value = 0.002. The relationship is significant; a positive attitude toward safety encourages motivation in clinical practice.
H4: Motivation → Implementation Behavior	Path coefficient (β) = 0.476, p-value = 0.000. The relationship is significant and strong; motivation plays a major role in the behavior related to the implementation of the patient safety model.
H5a: Perception → Knowledge → Attitude	Indirect effect (β) = 0.160, p-value = 0.004. A significant mediating effect is present; perception influences attitude through an increase in knowledge.
H5b: Perception → Knowledge → Attitude → Motivation	Indirect effect (β) = 0.086, p-value = 0.007. A significant serial mediation exists from perception to motivation through two intermediary variables.
H5c: Perception → Knowledge → Attitude → Motivation → Behavior	Indirect effect (β) = 0.041, p-value = 0.015. A significant full mediation pathway is observed from perception to implementation behavior.
H5d: Knowledge → Attitude → Motivation → Behavior	Indirect effect (β) = 0.065, p-value = 0.008. The serial mediation path from knowledge to behavior is also statistically significant.

In greater detail, the research findings are discussed as follows:

1. The Influence of Scientific and Research Evidence on Policy Decision-Making (H1)

The test of the first hypothesis indicates that the variable *scientific and research evidence* (X1) has a significant influence on *policy decision-making* (Y). The path coefficient was recorded at 0.931, with a p-value of 0.000 and a t-statistic of 76.689. These values exceed the established threshold of statistical significance ($p < 0.05$), thereby confirming the significance of the relationship. Consequently, Hypothesis H1 is accepted. From the perspective of Evidence-Based Management (EBMgt), this hypothesis aligns closely with the core tenets of the theory. Rousseau (2020) asserts that the use of scientific evidence is a critical component of rational and accountable organizational decision-making. Scientific evidence provides a data-driven framework that reduces subjective bias and enhances the legitimacy and

accuracy of managerial decisions. In the context of hospitals or clinics, as highlighted by Haghgoshayie and Hasanpoor (2021), the integration of research findings and academic literature can strengthen service strategies, improve patient care quality, and prevent errors arising from intuition-based decisions alone.

Support for the importance of scientific evidence is further emphasized by Madden et al. (2019), who stress the value of systematic and narrative evidence synthesis in understanding the context and impact of policy. They argue that decisions supported by scholarly review are more sensitive to the complexities of real-world problems and better equipped to provide targeted interventions. Thus, conceptually, Hypothesis H1 is strongly supported by theoretical justification that scientific evidence should indeed influence policy decision-making, particularly in the healthcare sector.

Nevertheless, counterbalancing arguments are offered by Arnold-Forster et al. (2022) and Woolnough et al. (2021), who caution that in practice, scientific evidence is not the sole dominant reference. Social, emotional, and public perception factors continue to influence managerial decisions, especially in public service settings that directly engage with patients. In emergency situations, limited time and restricted access to up-to-date scientific resources also pose implementation challenges. Furthermore, not all managers possess the training required to adequately interpret or assess the quality of scientific evidence.

2. The Influence of Facts and Information of Hospital on Policy Decision-Making (H2)

The testing of the second hypothesis reveals that the variable *facts and information of hospital* (X2) has a highly significant influence on *policy decision-making* (Y), with a path coefficient of 1.001, a p-value of 0.000, and a t-statistic of 995.768. This figure is the highest among all examined pathways, indicating that X2 is the strongest predictor in the model. Based on these results, Hypothesis H2 is accepted. Within the framework of Evidence-Based Management (EBMgt), as outlined by Janati et al. (2018), internal organizational data and information constitute one of the six primary categories of evidence used to support decision-making processes. In the hospital context, this encompasses a wide range of operational data generated from the Hospital Management Information System (HMIS), including unit performance reports, patient statistics, service efficiency metrics, and financial data. These data offer a factual and real-time representation that can be utilized by management to formulate policies based on actual conditions.

This approach aligns with Rousseau's (2020) assertion that *organizational evidence* enhances the legitimacy of decision-making processes because it is derived from documented and verifiable data. The use of hospital information in this context not only supports operational efficiency but also fosters greater transparency and accountability in policy formulation. This perspective is reinforced by Woolnough et al. (2021), who emphasize the importance of integrating internal data with relevant local practices. In practical terms, hospital dashboards, quality audit reports, and operational monitoring outcomes serve as key references for identifying priority areas and designing data-driven policy plans.

However, EBMgt theory also cautions that the use of internal data should not be isolated from broader social contexts and humanitarian values. Greene and Bryant (2021), for instance, highlight the need for a critical assessment of the normative values surrounding decision-making when utilizing organizational data. Exclusive reliance on internal data may lead to overly technocratic policies that fail to address the social dynamics and human factors within the hospital environment. Therefore, from the perspective of EBMgt, this hypothesis is accepted, as *facts and information of hospital* are fundamental components of evidence-based decision-making. Nevertheless, their application must be reflective and integrative to ensure that the resulting policies are not only operationally effective but also possess strong social legitimacy.

3. The Influence of Political-Social Development Plans on Policy Decision-Making (H3)

The third hypothesis examines the influence of *political-social development plans* (X3) on policy decision-making (Y). The results show a path coefficient of 0.987, with a p-value of 0.000 and a t-statistic of 449.510. All values meet the established significance criteria, indicating that X3 has a statistically significant impact on policy decision-making. Therefore, Hypothesis H3 is accepted. From the perspective of Evidence-Based Management (EBMgt), political-social development plans are not merely passive external contexts, but rather active sources of evidence that influence the direction and substance of organizational policies. Janati et al. (2018) explicitly identify political and social development plans as one of the six principal sources of evidence in EBMgt, on par with scientific evidence, organizational data, and professional expertise. This suggests that public policy, governmental regulations, and development initiatives in the health sector should be regarded as strategic inputs to be leveraged in the formulation of internal policies within hospitals or clinics.

As explained by Asl et al. (2021), political-social development programs are often cited as the most frequently referenced sources of evidence by managers within public health systems. Medium-term government development plans, policy directives from the Ministry of Health, and sectoral regulations not only establish normative boundaries but also provide substantive guidance for health service organizations in setting priorities, designing service strategies, and allocating resources.

This context aligns with the understanding that health policy is never entirely autonomous from the broader public policy framework. In EBMgt, sound managerial decisions require a capacity to interpret and respond adaptively to governmental policy directions. For instance, hospitals or clinics actively engaged in implementing national programs such as the National Health Insurance (JKN) scheme must align their internal policies with BPJS claim mechanisms, service quality management, and financial governance as dictated by national regulations.

Nevertheless, within an integrative EBMgt framework, the use of political-social development plans as a source of evidence must be balanced with other forms of evidence. Exclusive reliance on governmental policies may result in the instrumentalization of decisions that overlook local realities or the specific needs of the organization. Rousseau (2020) emphasizes that evidence-based decision-making requires the capacity to weigh multiple types of evidence simultaneously, including stakeholder needs and operational

data. In conclusion, from the standpoint of EBMgt theory, this third hypothesis is accepted. Political-social development plans are indeed legitimate and strategic sources of evidence within the policy decision-making process. Their influence is acknowledged both normatively and operationally, although their application must be integrated with other forms of evidence to ensure policies remain contextual and sustainable.

4. The Influence of Managers' Professional Expertise on Policy Decision-Making (H4)

The fourth hypothesis testing resulted in a path coefficient of 0.922 for the variable *managers' professional expertise* (X4), with a p-value of 0.000 and a t-statistic of 85.410. These results confirm a statistically significant and positive influence of managerial professional competence on policy decision-making. Based on this evidence, Hypothesis H4 is accepted. Within the framework of Evidence-Based Management (EBMgt), managers' professional expertise is recognized as a primary source of evidence. It not only serves as an interpretive lens for understanding data but also acts as a driving force in the internalization of evidence into managerial practice. This hypothesis directly tests the contribution of managerial experience and skills to the quality of evidence-based decision-making in healthcare setting.

As noted by Janati et al. (2018), professional expertise is among the five fundamental sources of EBMgt evidence alongside scientific research, organizational information, political-social development plans, and ethical-moral reasoning. In this context, managers are not merely data users but also critical evaluators who filter, adapt, and guide the implementation of evidence in complex organizational environments. The findings of this study confirm that Hypothesis H4 is supported. Managers' professional expertise has a significant effect on policy decision-making, as reflected in the high path coefficient and statistical significance. This reinforces the theoretical view that managers with field knowledge, organizational experience, and refined interpersonal skills are more capable of aligning research findings or internal data with the real conditions faced by healthcare institutions.

In practical terms, this professional expertise encompasses the ability to lead multidisciplinary teams, make high-pressure decisions, and translate regulatory policy into appropriate operational procedures. Moreover, as described by Pitsillidou et al. (2021), such expertise also determines adaptability to policy changes, risk assessment skills, and the confidence to navigate data ambiguity or conflicts of interest.

Nonetheless, this perspective has limitations when applied in isolation. Critical viewpoints, such as those presented by Arnold-Forster et al. (2022), suggest that professional expertise can introduce bias if not accompanied by openness to new data or stakeholder participation. In such cases, excessive reliance on experience may create an illusion of accuracy or an unquestioned sense of authority, thereby hindering critical reassessment of decisions. Thus, within the EBMgt framework, the findings supporting this fourth hypothesis underscore the importance of managerial expertise as a bridge between scientific knowledge and practical action. However, the effectiveness of this influence still requires integration with other sources of evidence and the presence of organizational systems that promote critical reflection and continuous learning. Ideal policy decisions are

not solely the product of individual knowledge but also of institutional capacity to synthesize experience with objective and relevant data.

5. The Influence of Ethical-Moral Evidence on Policy Decision-Making (H5)

The fifth hypothesis indicates that the variable *ethical-moral evidence* (X5) has a significant influence on policy decision-making (Y), with a path coefficient of 0.120, a p-value of 0.024, and a t-statistic of 2.268. Although the coefficient value is relatively lower compared to other variables, the result still meets the significance threshold. Therefore, Hypothesis H5 is accepted. This hypothesis examines whether ethical and moral considerations encompassing principles such as justice, social responsibility, and professional integrity play a significant role in influencing the policy decision-making process within healthcare settings. In the context of Evidence-Based Management (EBMgt), ethical-moral evidence is not merely a complementary component but serves as a safeguard of the integrity and legitimacy of every policy produced.

The structural model analysis confirms the acceptance of this hypothesis, although the effect size is the smallest among all exogenous constructs. This implies that while ethical-moral evidence exerts a statistically significant influence on policy decisions, it is not as substantively dominant as other evidence sources, such as organizational information or professional expertise. Theoretically, Janati et al. (2018) classify this dimension as one of the six key sources of evidence within EBMgt, affirming that managerial decisions in the healthcare sector must not be divorced from moral considerations particularly given that such decisions often pertain to human life and well-being. Decisions regarding resource allocation, patient prioritization, or infection control policies are not only evaluated in terms of efficiency but also through moral values such as justice and *non-maleficence* (doing no harm). In practice, as highlighted by Haghgoshayie and Hasanpoor (2021), managerial decisions that incorporate ethical reasoning tend to be more acceptable to both healthcare workers and patients, as they reflect sensitivity to humanistic values. For instance, a decision to deny services due to facility limitations may be perceived quite differently if it is justified ethically rather than merely through financial or administrative rationale.

However, this finding also reflects the complexity of ethics in practical decision-making. One possible reason for the relatively small coefficient is that ethical considerations are often implicit within organizations and may not be explicitly measured in information systems or policy procedures. In many cases, ethical reasoning emerges as *second-order reasoning*, following factual and technical considerations. This aligns with Arnold-Forster et al. (2022), who argue that the moral dimension often acts as a form of "soft power" in policy, serving more as a moderating or reinforcing influence than a primary driver in technical decision-making.

Other perspectives caution that overemphasis on morality without objective data may be counterproductive, especially in efficiency driven management systems. In such cases, managers may experience *ethical overload* moral pressure without sufficient data or systems to implement those values in a systematic way. This underscores the importance of integrating ethical values into operational contexts, rather than leaving them as merely normative declarations. In conclusion, the acceptance of the fifth hypothesis affirms that

ethical-moral evidence remains a vital element in evidence-based policy decision-making. However, its role tends to be foundational underpinning the legitimacy of decisions rather than serving as a primary driver in the technical deliberation process. Therefore, healthcare organizations must strengthen their reflective and discursive capacities within managerial systems to ensure that ethical dimensions are not only rhetorical but also internalized in daily policy practices.

Synthesis of Hypotheses

Within the framework of evidence-based management (EBMgt), the six hypotheses examined individually demonstrate that each dimension of evidence sources significantly influences the policy decision-making process at the clinic level. However, the magnitude and nature of these influences are not uniform. Therefore, a thematic synthesis is essential to position these findings within a holistic structure, enabling a deeper understanding of how the six exogenous variables interact, overlap, or complement one another in supporting evidence-informed decision-making.

The results indicate that facts and information of the hospital (X2) exert the most dominant influence on decision-making (Y), with a very high coefficient and an effect size of 0.944. This underscores the critical role of internal data infrastructure in clinical managerial practice. These findings reaffirm the strategic importance of management information systems (MIS) in providing real-time operational data spanning financial metrics, bed occupancy, length of stay, and protocol compliance (Rousseau, 2020; Janati et al., 2018). In this regard, organizational data is not merely administrative documentation but constitutes the backbone of evidence-informed policy.

In parallel, managers' professional expertise (X4) and stakeholders' values and expectations (X6) also demonstrate substantial effects, with effect sizes of 0.816 and 0.765, respectively. This combination illustrates the vital contribution of experiential evidence and stakeholder-driven decision-making, reinforcing the importance of incorporating both professional judgment and community expectations. This aligns with the multi-source evidence approach advocated in EBMgt, which emphasizes contextualized decision-making that integrates quantitative evidence with the practical insights and perceptions of key actors (Rousseau, 2020) (Janati et al, 2018).

Conversely, scientific and research evidence (X1), although statistically significant, exerts the least influence among all variables, with a lower coefficient and effect size of 0.133. This phenomenon can be explained through two main perspectives. First, access to relevant scientific publications at the clinical level remains limited and often poorly integrated into routine managerial practices. Second, a gap persists between academic research and practical applicability, with research findings frequently requiring contextual adaptation before implementation (Madden et al., 2019; Woolnough et al., 2021). These constraints reflect observations by Cruz and Blaney (2021), who emphasize that the adoption of research evidence is shaped by organizational culture and the evidence literacy of decision-makers.

Moreover, political-social development plans (X3) and ethical-moral evidence (X5) also show statistically significant influences, albeit with more moderate contributions. The political variable displays a high coefficient but lacks a uniquely measurable effect size, indicating its nature as a structural and exogenous factor shaping the policy boundaries yet remaining largely outside managerial control (Asl et al., 2021; Shaporenko, 2020). Ethical-moral evidence, though statistically significant, serves primarily as a normative guide reminding that managerial decisions must not only be rational but also morally grounded. As emphasized by Janati et al. (2018), such moral evidence is crucial for maintaining public trust in health institutions, even though its practical weight may be subordinated to administrative pressures or efficiency demands.

When synthesized into a single analytical structure, the six evidence dimensions illustrate that EBMgt is not a framework privileging one type of evidence over others. Rather, it promotes an interdependent architecture in which organizational facts provide a foundational anchor (data-driven logic), professional expertise offers interpretive clarity, and social-political-ethical values define the strategic and normative direction. Accordingly, decision making within the EBMgt paradigm is both comprehensive and contextually adaptive.

This synthesis reveals that the strength of the tested model lies not only in the statistical validity of each causal path but also in the complementarity among evidence sources. This finding resonates with the integrative model proposed by Janati et al. (2018), who argue that successful EBMgt implementation relies on an organization's capacity to align scientific, organizational, experiential, ethical, and social evidence into a cohesive decision-making framework. Therefore, the synthesized hypotheses affirm that the proposed EBMgt model functions as theoretically expected, while also highlighting the necessity of adaptive and context-sensitive approaches in health policy formulation.

Implications

Based on the synthesis of the six previously discussed hypotheses, this section elaborates on two primary implications of the research findings: (1) conceptual implications that enrich the evidence-based management (EBMgt) model in the context of healthcare decision-making, and (2) practical implications for policymakers and healthcare service managers in the field.

1. Conceptual Implications

The finding that *facts and information of hospitals* serve as the strongest predictor of policy decision-making provides a crucial foundation for revising the classical EBMgt framework. In much of the literature, *scientific evidence* is often regarded as the principal source of evidence (Rousseau, 2020; Hasanpoor et al., 2019). However, in clinical practice, *organizational evidence* or internal data is, in fact, the main determinant of policy direction. This underscores the importance of modifying theoretical assumptions within EBMgt to be more responsive to the organizational realities of health systems with limited resource capacities.

The theoretical EBMgt model proposed by Rousseau (2020) and further developed by Janati et al. (2018) tends to be symmetrical and normative, treating all sources of evidence as equally weighted. Yet, empirical findings indicate that in practice, each type of evidence has a different level of influence. In other words, an ideal EBMgt model must incorporate the principle of *differential salience*, recognizing that the dominance of a particular type of evidence is highly contingent on organizational structure, data literacy levels, professional capacity, and external contextual pressures.

These findings further support the argument that EBMgt is not a linear and mechanical system, but rather an *adaptive evidence ecology*, where synergies among various sources of evidence are dynamic and mutually adjusted according to the decision-making situation. This approach also necessitates a revised framework for developing EBMgt measurement instruments that not only assume inter-dimensional correlations but also map the relative dominance of each evidence source based on organizational context and public policy pressures.

2. Practical Implications

From a practical standpoint, the findings highlight the need to strengthen internal data infrastructures in healthcare service facilities, particularly at the clinic and hospital levels. The Hospital Management Information System (SIMRS) should not merely function as an administrative tool but rather as the backbone of policy decision-making. Therefore, investments in the integration of operational data (inpatient services, medical records, quality indicators) must become a policy priority for clinic administrators.

Second, health manager training should focus on developing *decision-making capabilities* based on both professional expertise and data literacy. Professional expertise (X4) proved to be the second strongest influence on policy decisions. However, managers who rely solely on intuition and practical experience without the ability to access, interpret, and translate data into policy risk making biased or inefficient decisions.

Third, the significant influence of stakeholder values and expectations (X6) underscores the importance of designing *participatory decision-making frameworks* within healthcare organizations. This implies that policies should not only be determined by top management but also include inputs from patients, medical staff, and local communities. Mechanisms such as patient advisory councils, consultative forums, or responsive complaint systems must be redesigned to ensure they serve a substantive rather than symbolic role.

Fourth, although *scientific evidence* and *ethical evidence* were found to have statistically weaker effects, this should not be taken as a justification for neglect. On the contrary, the lack of significant impact calls for targeted strengthening strategies, such as providing open access to scientific journals, offering training on research interpretation for managers, and establishing internal ethics boards within hospitals to support policy processes with high ethical implications.

Finally, the findings reaffirm that comprehensive implementation of EBMgt requires more than just data provision or literacy enhancement. What is truly needed is the cultivation of an *evidence culture* within organizations a culture that values the use of

evidence in all decision-making processes and is capable of aligning data rationality, professional intuition, and social values.

Conclusion

The findings of this study affirm that all six sources of evidence significantly influence decision-making at Clinic of Plantation Company X. Scientific and research evidence (H1) plays a vital role in promoting evidence-based practices, as reflected in its statistically significant effect. The most dominant factor is the facts and information of the hospital (H2), highlighting the critical importance of hospital information systems in shaping strategic policy decisions. Political-social development plans (H3) also demonstrate a significant influence, indicating that external factors such as government regulations and socio-political agendas directly impact internal clinical policies. Moreover, the professional expertise of managers (H4) has a statistically proven effect on policy decisions, emphasizing that managerial competence is a key driver of evidence-based management. Ethical-moral evidence (H5), although less dominant, still contributes significantly, underscoring the need for moral considerations in policy formulation. Finally, the values and expectations of all stakeholders (H6) also have a meaningful impact, confirming that effective policies must be aligned with the aspirations of all affected parties. Collectively, these results reinforce the multidimensional nature of evidence-based decision-making within healthcare organizations. Future research could expand the model by examining additional contextual variables such as technological readiness, organizational culture, and interdepartmental collaboration, or by conducting comparative studies across different healthcare institutions to validate the generalizability of these findings.

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