The Role of Health Services Management in Enhancing Patient Care and Satisfaction

Yusif Hilal Al Lihyani ¹, Mufid Saleha Alshmasi ², Walaa Ali Al Sawad ³, Eftekhar Abdullah Alsaihati ⁴, Fatimah Abdulqader S Jabal ⁵, Ghadi Amin Felemban ⁶, Hassan Ahmed Almohammedali ⁷, Amin Abdullah Al Sahw ⁸, Alsamiti, Mohammed Abdu ⁹, Zahrah Hatim Al Saleh ¹⁰, Sakinah Hussain Al Maki ¹¹, Rudayna Mohammed Al Mahe ¹², Azizh Abdulaziz Alselami ¹³, Khadijah Youssif Aldoukhi ¹⁴

- 1- Health Informatics, Technology and Digital Transformation, Tabuk Health Cluster, Saudi Arabia
 - 2- IT Technician, Qatif Central Hospital, Saudi Arabia
 - 3- Health Informatics, Qatif Central Hospital, Saudi Arabia
 - 4- Laboratory-Medical Technology, Regional Laboratory, Dammam, Saudi Arabia
 - 5- Medical Transcription Technician, King Abdullah Medical City, Makkah, Saudi Arabia
 - 6- Medical Coding Technician, King Abdullah Medical City, Saudi Arabia
 - 7- Operation Technician, Eastern Health Cluster, Salwa General Hospital, Saudi Arabia
 - 8- Operation Technician, Dammam Medical Complex, Saudi Arabia
 - 9- Health Administration, King Khalid Hospital, Tabuk, Saudi Arabia
 - 10- Nurse , AlReef PHC, Saudi Arabia 11- Nursing Technician, Saud Al Babtain Cardiac Center, Dammam, Saudi Arabia
 - 12- Nursing, Qatif Central Hospital, Saudi Arabia
 - 13- Nurse Specialist, Alwaha PHC, MOH, Eastern Jeddah Health Cluster, Saudi Arabia14- Nursing Technician, King Fahd House Petal, Saudi Arabia

Abstract:

Health services management plays a crucial role in enhancing patient care and satisfaction by ensuring efficient delivery of healthcare services. Managers in this field are responsible for coordinating various aspects of healthcare operations, including staffing, budgeting, and compliance with regulations. By fostering a culture that prioritizes patient-centered care, health services managers implement policies and practices that improve communication between healthcare providers and patients. They also leverage data analytics and feedback mechanisms to identify areas for improvement, streamline processes, and implement evidence-based practices. This proactive approach not only enhances the quality of care provided but also increases patient trust and engagement in their treatment processes. Additionally, health services management focuses on creating an environment conducive to both patient and staff satisfaction. Managers facilitate ongoing professional development for healthcare workers, which in turn leads to improved morale and better service delivery. By promoting teamwork, effective leadership, and resource allocation, health services management helps to create a stable workforce that is dedicated to quality patient care. Furthermore, patient satisfaction surveys and quality improvement initiatives are integral to this sector, allowing for adjustments in practices based on real-time feedback. Ultimately, effective health services management ensures that patient care is not only efficient but also empathetic, leading to higher levels of satisfaction among patients.

Keywords: Health services management, patient care, satisfaction, quality improvement, healthcare operations, patient-centered care, data analytics, communication, professional development, feedback mechanisms.

Introduction:

The healthcare sector is undergoing a dynamic transformation characterized by evolving patient expectations, technological advancements, and increased regulatory pressures. At the heart of this transformation lies the essential function of health services management, a field dedicated to the

structuring, enhancing, and organization of healthcare systems to improve efficiency and efficacy. This discipline serves as the backbone of healthcare delivery, encompassing an intricate network of activities that include planning, organizing, staffing, directing, and controlling healthcare resources. By aligning the strategic objectives of healthcare organizations with the

needs and preferences of patients, health services management plays a crucial role in enhancing patient care and satisfaction [1].

The significance of patient care and satisfaction cannot be overstated. High-quality patient care is not merely a benchmark for the healthcare profession; it is a moral imperative and a foundational aspect of patient safety and well-being. Indeed, the World Health Organization (WHO) emphasizes that "health service delivery should be patient-centered and responsive to the needs of individuals and communities." This patient-centered approach is increasingly recognized as a critical component of effective healthcare systems, influencing clinical outcomes, treatment adherence, and overall public trust in healthcare providers. However, achieving optimal patient care relies heavily on the effectiveness of management practices within healthcare organizations, which ensure that resources are allocated justly, operations are streamlined, and services are designed to meet patient expectations [2].

Notably, health services management intersects with a myriad of other disciplines, including public health, nursing, healthcare law, and business administration. This interdisciplinary approach allows managers to integrate diverse perspectives and expertise into the development of innovative solutions that address complex challenges in healthcare delivery. For instance, managers analyze patient data to identify trends, streamline operations, and make strategic decisions that enhance service quality. They mobilize and manage human resources, ensuring that healthcare teams are motivated, well-trained, and equipped to provide care that meets or exceeds patient expectations [3].

Moreover, the rapid evolution of technology in healthcare has further underscored the importance of effective health services management. The advent of electronic health records (EHRs), telehealth services, and Artificial Intelligence (AI) in diagnostics and treatment highlights the need for managers to not only grasp technical advancements but also to leverage these technologies to enhance patient care. By fostering an environment that embraces innovation, managers can optimize workflow, reduce patient wait times, and ultimately provide a seamless healthcare experience [4].

Furthermore, patient satisfaction serves as a key performance indicator (KPI) and is inextricably linked to health services management. Understanding what drives patient satisfaction —

whether it is the quality of care, accessibility of services, communication with healthcare providers, or the overall treatment experience — is essential for managers aiming to develop strategies that elevate care standards. Patient feedback mechanisms, including surveys, focus groups, and patient advisory councils, provide invaluable insights that inform management practices and enhance the patient experience [4].

In light of the pressing demands of contemporary healthcare, it becomes imperative to explore how health services management can effectively promote positive patient outcomes and satisfaction. This research aims to elucidate the multifaceted role of health services management, examining its impact on patient care quality, operational efficiency, and the overall patient experience. By investigating best practices, challenges, and case studies of successful health services management interventions, this research seeks to contribute to a deeper understanding of the ways in which informed managerial approaches can transform healthcare delivery [5].

The Significance of Patient-Centered Care in Healthcare Management:

In an era marked by rapid advancements in medical technology and an ever-evolving landscape of healthcare policies, the concept of patient-centered care (PCC) has emerged as a transformative approach to healthcare management. Patient-centered care places the patient at the core of healthcare processes, emphasizing their preferences, needs, and values in every aspect of care delivery [5].

Patient-centered care is defined by the Institute of Medicine as "care that is respectful of and responsive to individual patient preferences, needs, and values." It encourages active participation from patients in their own care, promotes communication between healthcare providers and patients, and emphasizes the importance of understanding the patient's perspective. As opposed to the traditional biomedical model, which often focuses solely on the disease and the physician's perspective, PCC seeks to create a holistic environment where care is tailored to the individual's unique situation. This can include considerations for cultural background, socioeconomic status, family involvement, and personal health goals [5].

One of the most significant aspects of patientcentered care is its direct correlation with improved patient outcomes. Research shows that when patients are actively engaged in their care, their overall satisfaction with the healthcare experience increases. A satisfied patient is more likely to adhere to treatment plans, attend follow-up appointments, and engage in preventative health measures. The Joint Commission has established that patient-centered care enhances clinical quality and efficiency, as it encourages patients to take ownership of their health, leading to better decision-making [6].

Moreover, studies have shown that organizations adopting patient-centered approaches report lower rates of hospital readmissions and complications. The focus on communication and relationships fosters a sense of trust. Trust, in turn, leads to an increased likelihood of patients being open about their health concerns, symptoms, and medication adherence. This accurate information flow allows healthcare providers to make better-informed decisions, ultimately resulting in improved health outcomes [7].

As healthcare costs continue to escalate globally, patient-centered care offers a promising solution to containment. The association between patient engagement and reduced healthcare expenses is evident. Engaged patients typically make healthier choices, thus lowering the usage of acute care services. By prioritizing preventative care, patient-centered models can prevent chronic diseases, leading to significant reductions in long-term healthcare costs [7].

Financially, healthcare organizations that invest in patient-centered care can achieve a competitive advantage. This approach can reduce overhead costs linked to readmissions and complications while maximizing operational efficiencies through enhanced patient engagement practices. In the long term, health systems that commit to PCC may find that their investments yield profound benefits, both in terms of cost savings and improved care quality [8].

Enhancing the Patient Experience

Experience is a pivotal aspect of healthcare management. Patients today seek more than just effective treatment; they desire a holistic experience that respects their autonomy and dignity as individuals. Patient-centered care embodies this by focusing on the patient's emotions and experiences throughout the care process. Elements such as empathy, active listening, and shared decision-

making play essential roles in cultivating a positive healthcare experience [9].

Healthcare institutions that prioritize PCC often witness increased patient loyalty and advocacy. The creation of an environment where patients feel valued leads to enhanced communication, promoting a culture of collaboration between patients and providers. When patients feel that their voices are heard and considered, they are more likely to exhibit trust and satisfaction towards the healthcare system, effectively transforming them into active participants in their own health journey [9].

The Role of Technology in Patient-Centered Care

Integrating technology in patient-centered care presents vast opportunities for enhancing patient engagement. Digital health tools, such as telemedicine, patient portals, and mobile health applications, have revolutionized how patients access care and communicate with their healthcare providers. For instance, telemedicine enables patients to consult with healthcare professionals from home, thereby improving accessibility, especially for those in rural or underserved areas [10].

Adopting technology also facilitates comprehensive data collection and analytics, allowing healthcare providers to better understand patient preferences and outcomes. Tailoring care plans based on real-time data analytics can lead to more personalized and effective healthcare interventions. As technology continues to evolve, it becomes increasingly essential to ensure that patient-centered care is integrated into the digital healthcare landscape, allowing for a seamless and cohesive experience for both patients and providers [11].

Challenges in Implementing Patient-Centered Care

Despite its numerous advantages, implementing patient-centered care is not without challenges. One of the primary obstacles is the cultural shift required within healthcare organizations. Transitioning from a provider-centric model to a patient-centered approach necessitates a paradigm change among healthcare professionals and administrative staff alike. This shift requires adequate training and restructuring of healthcare systems to prioritize effective communication and engagement strategies [11].

Additionally, resource limitations can pose a significant barrier. Many healthcare systems may lack the necessary infrastructure, technology, or financial resources to implement PCC initiatives fully. To counteract these challenges, healthcare organizations must commit to a long-term vision that includes investments in training, technology, and policy reforms that promote patient-centered practices [12].

Strategies for Improving Communication Between Providers and Patients:

Effective communication between healthcare providers and patients is paramount to achieving positive health outcomes. The intricacies of medical care go beyond the mere exchange of information; they involve establishing trust, mutual understanding, and collaboration. As healthcare systems become increasingly complex, barriers to communication can arise, potentially leading to misdiagnoses, non-adherence to treatment plans, and patient dissatisfaction [13].

Verbal communication is the foundation of the patient-provider relationship. Providers should aim to speak clearly and use layman's terms when discussing medical conditions, treatments, and procedures. Technical jargon can alienate patients and lead to misunderstandings. A strategy to mitigate this is the "teach-back" method, where providers ask patients to repeat information in their own words. This can help ensure that patients understand their health status and the necessary steps for treatment [13].

In addition to straightforward language, active listening is essential. Providers should be trained to give patients their full attention, using verbal affirmations like "I see" or "Go on" to encourage patients to share their concerns. This practice not only fosters a supportive environment but also helps providers identify and address patients' emotional and psychological needs, which can significantly impact their treatment [14].

Non-verbal communication plays a critical role in conveying empathy and understanding in healthcare settings. Body language, eye contact, and facial expressions can significantly affect how messages are received. Providers should be aware of their own body language, ensuring it aligns with their verbal messages. For instance, maintaining eye contact can demonstrate attentiveness and validation of the patient's feelings, while an open posture can signal approachability and readiness to engage [15].

Providers should also be trained to recognize patients' non-verbal cues. For example, a patient appearing withdrawn or avoiding eye contact may be experiencing anxiety or discomfort. By being attuned to these signals, providers can adapt their communication style to better meet the needs of their patients. Mindfulness training can support healthcare professionals in becoming more aware of both their own and their patients' non-verbal communication [15].

The advent of digital technology offers numerous tools to improve communication between providers and patients. Telehealth services have gained prominence, particularly during and after the COVID-19 pandemic. This mode of communication allows for real-time interaction, making healthcare more accessible for patients who may have mobility challenges or logistical issues. However, to maximize the efficacy of telemedicine, providers should ensure that patients are comfortable with the technology [16].

Moreover, patient portals where patients can access their medical records, lab results, and educational material represent another avenue to enhance communication. These platforms can facilitate proactive patient engagement by empowering individuals to take a more active role in their healthcare. Providers should encourage patients to use these resources and guide them on how to navigate them effectively, thereby fostering a culture of openness and participation [16].

Educating patients about their health conditions, treatment options, and preventive measures is critical in improving communication. When patients are well-informed, they are more likely to engage in discussions with their healthcare providers and ask pertinent questions. To promote patient education, healthcare institutions can adopt strategies such as workshops, informational brochures, and interactive online resources that cater to various literacy levels [17].

Additionally, employing visual aids such as diagrams, charts, and videos can greatly enhance understanding, particularly for complex medical explanations. Tailoring educational materials to suit diverse populations—including cultural, linguistic, and age differences—can ensure that all patients feel included and receive the information necessary to make informed decisions about their care [17].

Creating an inclusive environment is essential for facilitating open communication between providers

Letters in High Energy Physics ISSN: 2632-2714

and diverse patient populations. Healthcare providers must be attuned to the cultural, socioeconomic, and linguistic factors that influence patient experiences. Employing bilingual staff and providing translation services can help bridge communication gaps, especially for non-English speaking patients. Recognizing and integrating cultural competence into care delivery—ensuring that providers understand and respect cultural differences—can further enhance rapport and trust [17].

Moreover, empowering patients through shared decision-making can transform the patient-provider dynamic. Providers should involve patients in discussing treatment options and setting health goals based on patients' values, preferences, and lifestyles. This collaborative approach not only enriches the patient's experience but also fosters a sense of ownership over their health journey [18].

Data-Driven Decision Making in Enhancing Patient Outcomes:

In the modern healthcare landscape, the integration of data-driven decision-making (DDDM) has emerged as a transformative force capable of enhancing patient outcomes significantly. This postulation arises from the intersection of advanced data analytics, health informatics, and clinical expertise, ultimately reshaping how healthcare providers diagnose, treat, and manage patient care

Data-driven decision-making refers to the practice of guiding decisions based on data analysis rather than intuition or observation alone. In healthcare, it involves collecting, analyzing, and interpreting a wide range of data types, including clinical records, laboratory results, patient demographics, treatment outcomes, and even social determinants of health. This approach relies heavily on quantitative methods, utilizing tools such as predictive analytics, machine learning, and artificial intelligence to derive insights that were previously unattainable [19].

As the volume of data generated through electronic health records (EHRs) and other digital health technologies continues to grow, healthcare organizations are increasingly adopting data-driven methods. This shift is further propelled by the ongoing digitalization of healthcare networks and the standardization of data formats, facilitating the aggregation and analysis of vast datasets [20].

Methodologies Employed in DDDM

The methodologies employed in implementing datadriven decision-making in healthcare are diverse and sophisticated. At the core, they typically encompass the following components:

- 1. **Data Collection**: Healthcare providers implement systematic mechanisms for collecting data from various sources, including EHRs, wearables, patient surveys, and public health databases. Comprehensive data collection is pivotal as it lays the foundation for effective analysis [21].
- Data Integration and Management: Data from multiple sources must be integrated into a cohesive and usable format. This process often requires the use of data warehouses or cloud-based platforms that ensure data consistency, security, and accessibility.
- 3. **Data Analysis**: Advanced statistical techniques and machine learning algorithms are employed to analyze the data. Predictive analytics can help identify trends, correlations, and potential outcomes based on historical data, enabling providers to make informed choices [21].
- 4. **Visualization and Interpretation**: Data dashboards, visualizations, and real-time reports assist clinicians in easily interpreting complex datasets. Clear visual representation of data allows healthcare professionals to assess performance metrics, identify areas for improvement, and communicate findings effectively to stakeholders [21].
- 5. Feedback and Continuous Improvement: Continuous monitoring and feedback loops are crucial for evaluating the effectiveness of decisions made using data. By analyzing updates and outcomes, organizations can iterate on their strategies and enhance care delivery processes consistently[21].

Enhancing Patient Outcomes Through DDDM

The primary aim of implementing data-driven decision-making in healthcare is to enhance patient outcomes. The benefits are manifold and include:

- 1. **Personalized Medicine**: Data-driven approaches allow for a more personalized treatment regimen tailored to individual patients. By analyzing genetic, behavioral, and environmental data, healthcare providers can develop customized health plans that account for a patient's unique needs and risks. Personalized medicine not only improves treatment efficacy but also enhances patient engagement and satisfaction [22].
- 2. **Predictive Analytics**: By utilizing predictive models, healthcare providers can anticipate potential health issues before they escalate, allowing for timely interventions. For example, predictive algorithms can identify patients at risk of developing chronic diseases, enabling preventative strategies that can significantly enhance quality of life and reduce healthcare costs [22].
- 3. Improved Clinical Decision Making:
 Data-driven insights bolster clinical decision-making processes by providing evidence-based recommendations. Access to real-time data can help healthcare professionals make well-informed choices that ultimately enhance treatment outcomes and patient safety [23].
- 4. Efficient Resource Allocation: Applying data analytics helps healthcare organizations identify resource utilization patterns, enabling them to allocate resources more effectively. By understanding patient flow and demand, organizations can optimize staffing, reduce wait times, and enhance service delivery [23].
- 5. Patient Engagement and Empowerment: Data-driven solutions facilitate better communication between patients and providers. Transparency in sharing health data empowers patients to take an active role in their care and make informed decisions, resulting in improved adherence to treatment plans [24].

Challenges in Implementing DDDM

Despite the potential benefits of data-driven decision-making in enhancing patient outcomes,

various challenges hinder its effective implementation.

- 1. **Data Privacy and Security**: With the increasing collection and analysis of health data, concerns regarding data security and patient privacy are paramount. Healthcare organizations must implement stringent measures to protect sensitive information and comply with regulations such as HIPAA [25].
- Data Quality and Completeness: The
 accuracy and completeness of data are
 essential for reliable analysis. Incomplete
 or inaccurate data can lead to erroneous
 conclusions and inappropriate decisions,
 underscoring the need for rigorous data
 management practices.
- 3. Change Management: Transitioning to a data-driven culture requires significant organizational change. Healthcare providers must invest in training and education to foster a culture that prioritizes data-based decision-making among clinicians and administrative staff [26].
- 4. **Integration with Existing Systems**: Many healthcare organizations still rely on legacy systems that may not integrate seamlessly with modern data analytics platforms, impeding the flow of data and comprehensive analysis [26].
- 5. **Resistance to Change**: Some clinicians may be resistant to adopting data-driven approaches due to perceived complexities or skepticism about the reliability of data analytics. Engaging stakeholders and demonstrating the value of DDDM is critical to overcoming such resistance [26].

Quality Improvement Initiatives and Their Impact on Patient Satisfaction:

In the contemporary healthcare landscape, the focus on patient satisfaction has surged to prominence, operating in tandem with quality improvement (QI) initiatives. As healthcare providers navigate an increasingly competitive environment, the demand for higher quality services intersects with the expectations of patients for personalized, effective, and efficient care. Quality improvement initiatives are systematic, formalized approaches to analyzing and improving health care services that directly impact patient satisfaction [27].

Quality improvement in healthcare involves the ongoing efforts to enhance patient care processes, outcomes, and the overall quality of healthcare delivery. These efforts often employ structured methodologies, such as Plan-Do-Study-Act (PDSA) cycles, Lean principles, and Six Sigma techniques, among others. The primary aim is to identify inefficiencies, reduce variations in care, and enhance the patient experience [27].

While the focus on quality improvement can trace its roots back several decades, its prominence has surged recently due to an increasing awareness of its correlation to patient outcomes and satisfaction. The passage of the Affordable Care Act in the United States initiated numerous reforms, emphasizing quality over quantity in healthcare services. Consequently, organizations began to adopt QI initiatives to align their objectives with both regulatory mandates and patient expectations [28].

Strategies of Quality Improvement Initiatives

Quality Improvement Initiatives can be diverse in their scope and implementation. Some of the widely recognized strategies include:

- 1. Patient-Centered Care: This approach emphasizes placing the patient at the core of healthcare delivery. By involving patients in decision-making and personalizing care plans according to individual needs, organizations can substantially boost satisfaction levels. Initiatives such as shared decision-making frameworks facilitate communication between healthcare providers and patients, ensuring that the patients' values and preferences are respected [29].
- 2. Standardization of Care Processes:
 Standardizing protocols and procedures can significantly minimize errors and enhance the consistency of care provided. For instance, implementing evidence-based guidelines in clinical practices ensures that patients receive care that is scientifically validated and consistently delivered, thereby improving trust and satisfaction [30].
- 3. **Employee Engagement and Training**: Engaged healthcare staff are more likely to provide superior care. Training and development programs aimed at improving staff morale, competency, and teamwork

- can lead to improved patient interactions and subsequently higher satisfaction rates. Initiatives that foster open communication, like regular feedback sessions, can help staff feel valued and motivated [31].
- Use of Technology: Integrating health information technology-such records (EHR). electronic health telemedicine, and patient portals—can streamline processes. enhance communication, and improve access to care. These elements allow for greater transparency, making patients feel more informed and involved in their care. For instance, patient portals can enhance engagement by granting patients access to their health information and allowing them to conveniently schedule appointments or communicate with providers [32].
- 5. Patient Feedback Mechanisms: Establishing robust systems to gather and analyze patient feedback has become increasingly important. Tools like surveys, focus groups, and feedback interviews provide essential insights into patients' perceptions and experiences. Analyzing this data can guide healthcare organizations in pinpointing areas for improvement and validating the effectiveness of current practices [33].

Evaluating the Impact of Quality Improvement Initiatives

The relationship between quality improvement initiatives and patient satisfaction is complex and multifaceted. Numerous studies have documented positive correlations—facilitating a better understanding of how QI efforts lead to improved satisfaction scores. For instance, a comprehensive review published in the *Journal of Healthcare Management* concluded that organizations that invested in quality improvement techniques showed a marked increase in patient satisfaction ratings compared to those that did not [34].

Moreover, various case studies reveal that specific interventions yield tangible results. For example, a hospital that implemented a revised discharge process saw reduced readmission rates and improved patient feedback due to clear communication and better support during the transition out of inpatient care. This underscores the notion that quality improvement initiatives not only

enhance operational efficiency but also foster a more satisfying patient experience [35].

However, it is also essential to recognize the challenges faced during the implementation of QI initiatives. Resistance to change among staff, resource limitations, and the complexity of healthcare environments can hinder progress. Continuous evaluation and a commitment to fostering a culture of safety and improvement are vital to sustaining success in these endeavors [36].

Role of Leadership in Fostering a Positive Healthcare Environment:

In the ever-evolving landscape of healthcare, leadership plays a pivotal role in shaping the environment in which care is delivered. A positive healthcare environment is essential not only for the wellbeing and satisfaction of patients but also for the morale and productivity of healthcare professionals. Effective leadership sets the tone and cultivates a culture that promotes engagement, collaboration, and continuous improvement [37].

Transformational leadership is characterized by the ability of leaders to inspire and motivate their teams to achieve extraordinary outcomes. In the healthcare context, transformational leaders are adept at creating a shared vision for the organization, fostering an environment of trust, and facilitating professional growth among team members. They do not merely manage tasks; instead, they engage with their staff on a deeper level, promoting an atmosphere where creativity and innovation are encouraged [38].

Such leadership styles contribute to a positive healthcare environment by instilling a sense of purpose among caregivers. When nurses, doctors, and other healthcare professionals feel that their work contributes to a larger mission, they are more likely to remain engaged and dedicated. This vision must be communicated effectively, ensuring that all team members understand their role in achieving organizational goals and improving patient outcomes. In hospitals that exhibit transformational leadership, studies have shown lower burnout rates among staff and higher levels of patient satisfaction [38].

One of the foremost responsibilities of leaders in healthcare settings is to foster open and effective communication. A positive healthcare environment relies heavily on transparent dialogue among colleagues, between administrative staff and clinical teams, and between providers and patients. Leaders must create channels for communication that allow healthcare workers to express their ideas, concerns, and feedback without fear of reprisal. This openness not only contributes to a supportive culture but also allows for the identification of potential issues before they escalate into larger problems [39].

Furthermore, leaders must prioritize communication training for their staff. With effective communication skills, healthcare professionals can better interact with patients, listen to their concerns, and provide information in a clear and compassionate manner. When patients feel heard and understood, their overall experience with the healthcare system improves significantly, leading to better adherence to treatment plans and improved health outcomes [40].

A critical component of fostering a positive healthcare environment is empowering staff at all levels. Leadership should prioritize creating opportunities for professional development, mentorship, and advancement within the organization. This approach not only helps healthcare professionals grow in their respective fields but also cultivates a culture of learning that enhances the overall quality of care [41].

Empowered staff members are more likely to take initiative and seek innovative solutions to challenges that arise in the healthcare setting. Leaders can create this empowerment by actively involving team members in decision-making processes, soliciting their input on policy changes, and recognizing their contributions to the organization. A culture that encourages ownership and accountability leads to increased job satisfaction, decreased turnover rates, and a more cohesive team environment [42].

In recent years, there has been a growing emphasis on patient-centered care—a care approach that respects and responds to individual patient preferences, needs, and values. Effective leadership is crucial in instilling this philosophy within healthcare organizations. Leaders must advocate for practices that prioritize the patient experience, which includes promoting staff training that equips healthcare professionals to provide personalized care and effective patient communication [43].

As part of fostering a patient-centered environment, leaders should also encourage interdisciplinary collaboration among healthcare providers. By breaking down silos and promoting teamwork, leaders can create a more holistic approach to patient

care that addresses the diverse needs of individuals. This collaborative environment enhances not only the healthcare experience for patients but also the satisfaction of providers who feel supported and engaged in a shared mission [44].

Creating a Culture of Safety

Beyond fostering engagement and satisfaction, leadership must also prioritize the creation of a culture of safety within healthcare environments. Surgical errors, hospital-acquired infections, and other adverse events can severely impact patient outcomes and a facility's reputation. Leaders play a crucial role in instilling a culture that prioritizes patient safety by encouraging reporting and transparency regarding errors or near misses [45].

Effective leaders understand that incidents must be viewed as opportunities for growth and improvement rather than blame assignments. By analyzing what went wrong and addressing systemic issues, leaders can create stronger protocols and enhance the overall safety of care delivery. Moreover, when staff members feel safe to report concerns or mistakes without fear of punishment, the organization can learn and adapt more effectively, ultimately benefiting patient care [45].

Training and Development: Empowering Healthcare Staff for Better Care:

In the modern era, the healthcare sector faces an unprecedented array of challenges, necessitating a continuously evolving workforce that is equipped to meet the demands of an increasingly complex environment. The foundational cornerstone of addressing these challenges lies in training and development programs aimed at healthcare personnel [46].

healthcare landscape undergoes rapid transformations propelled by advancements in shifting patient technology, demographics, increased incidence of chronic diseases, and heightened regulatory requirements. In such a volatile environment, healthcare practitioners and ranging from physicians nurses administrative staff—must be adept at navigating new protocols, utilizing sophisticated medical equipment, and understanding the intricacies of patient-centered care [47].

Moreover, the COVID-19 pandemic underscored the urgent need for cohesive and competent healthcare teams. Professionals were challenged not only by the heightened patient loads and the rapid dissemination of new treatment protocols but also by the necessity of interdisciplinary collaboration. Consequently, effective training and development programs have emerged as essential instruments for ensuring that healthcare staff possess the necessary knowledge and skills to deliver safe, effective, and high-quality care [48].

Methodologies for Training and Development

A myriad of methodologies exist for the training and development of healthcare staff, each tailored to cater to a diverse set of learning styles and environmental conditions. Key approaches include:

- 1. **On-the-Job Training (OJT)**: This method entails practical, experiential learning in the workplace. Newly hired healthcare professionals often benefit from shadowing experienced colleagues, which not only builds clinical skills but also aids in acculturation within the healthcare setting [49].
- 2. Continuing Medical Education (CME):
 For physicians and medical specialists,
 CME programs are critical for remaining
 updated on the latest medical
 advancements and treatment protocols.
 Many medical boards require a certain
 number of CME credits for license
 renewal, ensuring that practitioners stay
 engaged in lifelong learning [49].
- 3. **Simulation-Based Training**: Utilizing high-fidelity simulations, healthcare personnel can practice their skills in a safe and controlled environment before applying them in real-world scenarios. This approach enhances the readiness and confidence of staff to care for patients during high-stress situations, such as surgeries or emergencies [50].
- 4. E-Learning and Online Courses: With the advent of digital technology, e-learning platforms provide flexible, accessible training opportunities that facilitate asynchronous learning. These platforms allow healthcare professionals to access which demand, coursework on particularly beneficial for busy professionals requiring continued education without disrupting their schedules [50].

5. Workshops and Seminars: Short-term workshops and seminars led by industry experts can provide intensive training on specific topics such as leadership skills, technological innovations, and patient communication techniques. This can foster a culture of continuous professional development within healthcare organizations [50].

The Impact on Patient Care

The influence of training and development on the quality of patient care cannot be overstated. Well-trained healthcare staff are more adept at making informed clinical decisions, managing complex patient needs, and adhering to the latest care guidelines. Key outcomes of effective training initiatives include:

- Improved Patient Safety: Training programs focused on best practices, risk management, and communication lead to heightened awareness among staff regarding potential hazards. This is particularly vital in reducing medical errors and enhancing overall patient safety [51].
- 2. Enhanced Patient Satisfaction:
 Competent and confident healthcare personnel improve the patient experience.
 Staff members who engage thoughtfully with patients, communicate effectively, and respond to their needs are more likely to foster positive relationships, ultimately influencing patients' perceptions of care quality [52].
- Better Health Outcomes: Continuous education enhances staff proficiency in conditions, managing chronic understanding evidence-based treatment modalities, and implementing individualized care plans. This translates directly into improved health outcomes for patients, including better disease management and reduced hospital readmissions [53].

Emerging Trends in Training and Development

The healthcare sector is continuously evolving, and so too must the training and development processes that support its workforce. Several trends are shaping the future of training within healthcare environments:

- 1. Interdisciplinary Learning: As healthcare increasingly embraces teambased care models, interdisciplinary training is becoming essential. Training programs that promote collaborative practice among nurses, physicians, pharmacists, and other disciplines lead to improved teamwork, communication, and holistic patient care [53].
- Telehealth Training: The rising utilization of telemedicine necessitates specialized training for healthcare providers. Understanding the nuances of delivering effective care remotely, utilizing telehealth tools, and maintaining patient engagement from a distance become vital components of contemporary healthcare training [53].
- 3. Focus on Soft Skills: The integration of soft skills development—such as emotional intelligence, empathy, and communication—into training programs recognizes that technical prowess alone is insufficient for delivering exceptional patient care. Staff equipped with strong interpersonal skills contribute to healthier patient-practitioner relationships [54].
- 4. **Data-Driven Learning**: The use of big data and analytics in evaluating training effectiveness and staff performance is becoming more pronounced. By monitoring outcomes and measuring the impact of training, healthcare organizations can tailor development programs to meet the evolving needs of their workforce and their patients [54].

Measuring Patient Satisfaction: Tools and Frameworks for Assessment:

Patient satisfaction is increasingly recognized as a critical metric within healthcare systems, reflecting the quality of care provided and influencing the overall patient experience. Understanding and measuring patient satisfaction not only helps healthcare providers assess their performance but also enables them to implement necessary improvements

Patient satisfaction serves multiple purposes within healthcare settings. First and foremost, it provides direct insights into patient experiences, perceptions, and feelings regarding their care. High levels of patient satisfaction are associated with better adherence to medical advice, reduced malpractice claims, and improved health outcomes. Satisfied patients are also more likely to engage in long-term relationships with healthcare providers and recommend them to others [55].

In an era where healthcare is shifting towards value-based care, stakeholder interest in patient satisfaction has intensified. Regulatory bodies like the Centers for Medicare & Medicaid Services (CMS) incorporate patient satisfaction measures into the evaluation of healthcare services, impacting reimbursement strategies. Thus, measuring patient satisfaction is not just an operational concern; it has financial implications for healthcare entities.

Numerous tools have been developed to assess patient satisfaction through surveys and other methodologies. Each tool has its unique features, advantages, and limitations. Below, we explore some of the most widely used tools and approaches [55].

1. Surveys and Ouestionnaires

Surveys are the most common tools for measuring patient satisfaction due to their ability to collect large amounts of data in a structured manner. Various standardized survey instruments are utilized, including:

- The Press Ganey Patient Satisfaction Survey: One of the most recognized tools, this survey focuses on core aspects of patient care, including communication with nurses and doctors, environment, and discharge instructions. Press Ganey data is often used for benchmarking within the healthcare industry [56].
- HCAHPS (Hospital Consumer Assessment of Healthcare Providers and Systems): Established as a national standard for measuring patients' perceptions of hospital care, HCAHPS covers communication, responsiveness of hospital staff, pain management, and overall hospital rating. This survey allows for comparisons across hospitals, providing the public with data on patient experiences [56]
- NPS (Net Promoter Score): Although originally designed for customer service industries, NPS has been adapted for healthcare. This tool gauges patient loyalty

and propensity to recommend a service by asking patients how likely they are to promote the healthcare facility to family and friends [56].

2. Focus Groups and Interviews

Qualitative methods, such as focus groups and indepth interviews, allow healthcare providers to gain deeper insight into patient experiences. These methodologies enable more nuanced feedback, revealing specific issues that cannot be captured through standardized surveys [57].

Focus groups facilitate discussions among patients, providing opportunities to explore topics in detail and engage patients in conversations about their healthcare journey. In-depth interviews can delve into individual stories, revealing patient expectations, values, and feelings in a way that surveys cannot [57].

3. Patient-Reported Outcome Measures (PROMs)

PROMs evaluate the impact of health outcomes from the patient's perspective, often encompassing measures of physical, mental, and social well-being. These tools focus on specific conditions or treatments and can help assess overall satisfaction related to those experiences. For instance, a PROM might evaluate a patient's quality of life after a surgical procedure, offering valuable insights related to satisfaction and recovery [58].

To systematically evaluate patient satisfaction, various frameworks guide healthcare providers in collecting, analyzing, and interpreting data. Below are some prominent frameworks that ensure comprehensive and actionable insights [58].

1. Donabedian Model

Developed by Avedis Donabedian, this model provides a framework for evaluating healthcare services by categorizing quality into three components: structure, process, and outcome.

- **Structure** refers to the attributes of the settings where care occurs, including resources, staff qualifications, and hospital environment [59].
- **Process** encompasses the actual delivery of care, detailing how services are provided, communication between caregivers and patients, and the degree of patient engagement in their care [59].

• Outcome describes the results of the care received, including functional status, patient satisfaction, and clinical outcomes [59].

By applying the Donabedian model, health organizations can analyze how structural components influence processes and eventually impact patient satisfaction outcomes.

2. The SERVQUAL Model

The SERVQUAL model, originally developed for assessing service quality in business, has been adapted to healthcare for measuring patient satisfaction. This model emphasizes understanding the gap between patients' expectations and their perceptions of the actual service delivered, thus identifying areas for improvement. It includes five dimensions—tangibles, reliability, responsiveness, assurance, and empathy— to evaluate the quality of healthcare services from the patient's perspective [60].

3. The Balanced Scorecard

The Balanced Scorecard is a strategic management framework that connects performance measures across four perspectives: financial, customer, internal processes, and learning and growth. In healthcare, patient satisfaction can be integrated into this framework by linking it to financial performance (patient retention), operational efficiency (reducing wait times), and staff training initiatives (enhancing communication skills) [61].

Challenges in Measuring Patient Satisfaction

Despite the benefits of measuring patient satisfaction, healthcare organizations face several challenges. One significant challenge is ensuring that patient feedback is inclusive and representative of diverse populations. Variations in culture, language, and health literacy can affect how satisfaction is perceived and reported [62].

Furthermore, the variability in survey design, administration, and interpretation can introduce bias. For instance, survey timing (e.g., immediately post-visit vs. later) can influence responses. Therefore, healthcare organizations must standardize their approach and be sensitive to these variations [63].

The landscape of patient satisfaction measurement is evolving, driven by advancements in technology and increasing patient engagement. Digitization has enabled healthcare organizations to utilize online surveys, mobile applications, and electronic health records (EHR) integration, enhancing the speed and ease of data collection [64].

Moreover, artificial intelligence (AI) and big data analytics are being explored for real-time sentiment analysis from various channels, including social media and patient portals. These innovations promise to provide deeper insights into patient experiences and satisfaction levels [65].

Conclusion:

In conclusion, health services management plays a pivotal role in enhancing patient care and satisfaction through a multifaceted approach that prioritizes efficiency, communication, and quality improvement. By implementing patient-centered practices and fostering a supportive environment for healthcare professionals, health services managers can significantly influence the overall healthcare experience. The integration of data-driven decision-making and continuous feedback loops allows for ongoing assessment and refinement of care delivery, ensuring that patient needs are met effectively.

Moreover, the emphasis on staff training and development not only boosts workforce morale but also translates into better patient interactions and outcomes. As the healthcare landscape continues to evolve, the strategic role of health services management will remain vital in adapting to changes and challenges, ultimately aiming to provide compassionate, high-quality care that leads to heightened patient satisfaction. By focusing on the comprehensive management of health services, we can create a healthcare system that not only addresses the clinical needs of patients but also supports their emotional and psychological well-being.

References:

- Ayanian J.Z., Markel H. Donabedian's lasting framework for health care quality. N. Engl. J. Med. 2016;375:205–207. doi: 10.1056/NEJMp1605101.
- Batbaatar E., Dorjdagva J., Luvsannyam A., Savino M.M., Amenta P. Determinants of patient satisfaction: A systematic review. Perspect. Public Health. 2017;137:89–101. doi: 10.1177/1757913916634136.
- 3. Elixhauser A., Steiner C., Fraser I. Volume thresholds and hospital characteristics in the

- United States. Health Aff. 2003;22:167–177. doi: 10.1377/hlthaff.22.2.167.
- Ferreira D., Marques R.C. Public-private partnerships in health care services: Do they outperform public hospitals regarding quality and access? Evidence from Portugal. Socio-Econ. Plan. Sci. 2020;73:100798. doi: 10.1016/j.seps.2020.100798.
- Needleman J., Buerhaus P.I., Stewart M., Zelevinsky K., Mattke S. Nurse staffing in hospitals: Is there a business case for quality? Health Aff. 2006;25:204–211. doi: 10.1377/hlthaff.25.1.204.
- Al-Abri R., Al-Balushi A. Patient satisfaction survey as a tool towards quality improvement. Oman Med. J. 2014;29:3–7. doi: 10.5001/omj.2014.02.
- Kaya O., Teymourifar A., Ozturk G. Analysis of different public policies through simulation to increase total social utility in a healthcare system. Socio-Econ. Plan. Sci. 2020;70:100742. doi: 10.1016/j.seps.2019.100742.
- 8. Sofaer S., Firminger K. Patient perceptions of the quality of health services. Annu. Rev. Public Health. 2005;26:513–559. doi: 10.1146/annurev.publhealth.25.050503.15395
- Prakash B. Patient satisfaction. J. Cutan. Aesthetic Surg. 2010;3:151–155. doi: 10.4103/0974-2077.74491.
- Miao R., Zhang H., Wu Q., Zhang J., Jiang Z. Using structural equation modeling to analyze patient value, satisfaction, and loyalty: A case study of healthcare in China. Int. J. Prod. Res. 2020;58:577–596. doi: 10.1080/00207543.2019.1598595.
- 11. Donabedian A. Evaluating the quality of medical care. Milbank Q. 2005;83:691–729. doi: 10.1111/j.1468-0009.2005.00397.x.
- Levin-Scherz J., DeVita N., Timbie J. Impact of pay-for-performance contracts and network registry on diabetes and asthma HEDIS® measures in an integrated delivery network. Med. Care Res. Rev. 2006;63:14–28. doi: 10.1177/1077558705284057.
- 13. Ramsaran-Fowdar R.R. Identifying health care quality attributes. J. Health Hum. Serv. Adm. 2005;27:428–443.
- Ferreira D., Marques R.C. Identifying congestion levels, sources and determinants on intensive care units: The Portuguese case. Health Care Manag. Sci. 2018;21:348–375. doi: 10.1007/s10729-016-9387-x.

- Rogers A.E., Hwang W.T., Scott L.D., Aiken L.H., Dinges D.F. The working hours of hospital staff nurses and patient safety. Health Aff. 2004;23:202–212. doi: 10.1377/hlthaff.23.4.202.
- Almedia R.S., Bourliataux-Lajoinie S., Martins M. Satisfaction measurement instruments for healthcare service users: A systematic review. Cad. Saúde Pública. 2015;31:11–25. doi: 10.1590/0102-311X00027014.
- 17. Naidu A. Factors affecting patient satisfaction and healthcare quality. Int. J. Health Care Qual. Assur. 2009;22:366–381. doi: 10.1108/09526860910964834.
- Jackson J.L., Chamberlin J., Kroenke K. Predictors of patient satisfaction. Soc. Sci. Med. 2001;52:609–620. doi: 10.1016/S0277-9536(00)00164-7.
- 19. Marley K.A., Collier D.A., Goldstein S.M. The role of clinical and process quality in achieving patient satisfaction in hospitals. Decis. Sci. 2004;35:349–368. doi: 10.1111/j.0011-7315.2004.02570.x.
- Farzianpour F., Byravan R., Amirian S. Evaluation of patient satisfaction and factors affecting it: A review of the literature. Health. 2015;7:1460. doi: 10.4236/health.2015.711160.
- Miao R., Zhang H., Wu Q., Zhang J., Jiang Z. A quantitative model for patient behavioral decisions in the urgent care industry. Socio-Econ. Plan. Sci. 2013;47:50–64. doi: 10.1016/j.seps.2012.08.003.
- 22. Zarei E., Daneshkohan A., Pouragha B., Marzban S., Arab M. An empirical study of the impact of service quality on patient satisfaction in private hospitals, Iran. Glob. J. Health Sci. 2015;7:1. doi: 10.5539/gjhs.v7n1p1.
- 23. Ryu S., Ho S.H., Han I. Knowledge sharing behavior of physicians in hospitals. Expert Syst. Appl. 2003;25:113–122. doi: 10.1016/S0957-4174(03)00011-3.
- 24. Li Z., Hou J., Lu L., Tang S., Ma J. On residents' satisfaction with community health services after health care system reform in Shanghai, China, 2011. BMC Public Health. 2012:S9. doi: 10.1186/1471-2458-12-S1-S9.
- Wolf M.H., Putnam S.M., James S.A., Stiles W.B. The Medical Interview Satisfaction Scale: Development of a scale to measure patient perceptions of physician behavior. J. Behav. Med. 1978;1:391–401. doi: 10.1007/BF00846695.
- Sun J., Hu G., Ma J., Chen Y., Wu L., Liu Q., Hu J., Livoti C., Jiang Y., Liu Y. Consumer

- satisfaction with tertiary healthcare in China: Findings from the 2015 China National Patient Survey. Int. J. Qual. Health Care. 2017;29:213–221. doi: 10.1093/intqhc/mzw160.
- Joosten E.A., DeFuentes-Merillas L., De Weert G., Sensky T., Van Der Staak C., de Jong C.A. Systematic review of the effects of shared decision-making on patient satisfaction, treatment adherence and health status. Psychother. Psychosom. 2008;77:219–226. doi: 10.1159/000126073.
- 28. Ganasegeran K., Perianayagam W., Abdul Manaf R., Jadoo A., Ahmed S., Al-Dubai S.A.R. Patient satisfaction in Malaysia's busiest outpatient medical care. Sci. World J. 2015;2015:714754. doi: 10.1155/2015/714754.
- 29. Bleustein C., Rothschild D.B., Valen A., Valatis E., Schweitzer L., Jones R. Wait times, patient satisfaction scores, and the perception of care. Am. J. Manag. Care. 2014;20:393–400.
- Hussain A., Asif M., Jameel A., Hwang J. Measuring OPD Patient Satisfaction with Different Service Delivery Aspects at Public Hospitals in Pakistan. Int. J. Environ. Res. Public Health. 2019;16:2340. doi: 10.3390/ijerph16132340.
- 31. Karatepe O.M., Yavas U., Babakus E. Measuring service quality of banks: Scale development and validation. J. Retail. Consum. Serv. 2005;12:373–383. doi: 10.1016/j.jretconser.2005.01.001.
- 32. Mohd A., Chakravarty A. Patient satisfaction with services of the outpatient department. Med. J. Armed Forces India. 2014;70:237–242. doi: 10.1016/j.mjafi.2013.06.010.
- 33. Shabbir A., Malik S.A., Malik S.A. Measuring patients' healthcare service quality perceptions, satisfaction, and loyalty in public and private sector hospitals in Pakistan. Int. J. Qual. Reliab. Manag. 2016;33:538–557. doi: 10.1108/IJQRM-06-2014-0074.
- 34. Li M., Lowrie D.B., Huang C.-Y., Lu X.-C., Zhu Y.-C., Wu X.-H., Shayiti M., Tan Q.-Z., Yang H.-L., Chen S.-Y. Evaluating patients' perception of service quality at hospitals in nine Chinese cities by use of the ServQual scale. Asian Pac. J. Trop. Biomed. 2015;5:497–504. doi: 10.1016/j.apjtb.2015.02.003.
- 35. Niba M.B. Master's Thesis. University of Natal; Pietermaritzburg, South Africa: 2000. Communication between Healthcare Workers and Isizulu Speaking Female Patients at the Scottsville Clinic.
- 36. Dong W., Zhang Q., Yan C., Fu W., Xu L. Residents' satisfaction with primary medical

- and health services in Western China. BMC Health Serv. Res. 2017;17:298. doi: 10.1186/s12913-017-2200-9.
- 37. Dziegielewski SF. Managed-care Principles: the Need for Social Work in the Health Care Environment. Crisis Intervention Time-Limited Treat (1996) 3(2):97–110.
- 38. Nguyen T. Patient Satisfaction with the Hospital Quality in Vietnam: a Systematic Review from 2000-2015. Vietnam J Public Health (2018) 45(6/2018):33–44.
- 39. Agyapong A, Afi JD, Kwateng KO. Examining the Effect of Perceived Service Quality of Health Care Delivery in Ghana on Behavioural Intentions of Patients: The Mediating Role of Customer Satisfaction. Int J Healthc Management (2018) 11(4):276–88.
- 40. Acharya M, Ghimire P, Ghimire P. SERVQUAL Questionnaire Based Health Service Quality Assessment in a Private Hospital of Western Nepal. Nep J Med Sci (2020) 5(1):79–85.
- 41. Kaiser H. A Second Generation Little Jiffy. Psychometrika (1970) 35:401–15.
- 42. Liu L, Fang J. Study on Potential Factors of Patient Satisfaction: Based on Exploratory Factor Analysis. Patient Prefer Adherence (2019) 13:1983–94.
- Cronin Jr J, Taylor S. Measuring Service Quality - A Reexamination and Extension. J Marketing (1992) 56:55–68.
- 44. Hung PT, Anh PQ, Dieu LM. Status on Satisfaction of Inpatients in An Phu District General Hospital An Giang Province in 2016. Vietnam J Prev Med (2017) 27(5/2017):96–103.
- 45. Vietnam Ministry of Health. "Approving the Project on Determining a Method to Measure Patient's Satisfaction with Public Health Services" (2014). 4448/QĐ-BYT. Hanoi. Vietnam.
- 46. Asif M, Qing M, Hwang J, Shi H. Ethical Leadership, Affective Commitment, Work Engagement, and Creativity: Testing a Multiple Mediation Approach. Sustainability (2019) 11:4489.
- 47. Parasuraman A, Zeithaml V, Berry L. SERVQUAL: A Multiple-Item Scale for Measuring Consumer Perceptions of Service Quality. J Retailing (1988) 64(1):12–40.
- 48. Aga TB, Ferede YM, Mekonen EG. Satisfaction and Associated Factors towards Inpatient Health Care Services Among Adult Patients at Pawie General Hospital, West Ethiopia. Plos One (2021) 16(4):e0249168.
- Vietnam Ministry of Health. Decision on Guidance on Procedures for Medical Examination at Outpatient Departments of Hospitals (2013). Hanoi, Vietnam.

- 50. Ward KF, Rolland EP, Raymond A. Improving Outpatient Health Care Quality: Understanding the Quality Dimensions. Health Care Manage Rev (2005) 30(4):361–71.
- 51. Tengilimoglu D, Kisa A, Dziegielewski SF. Measurement of Patient Satisfaction in a Public Hospital in Ankara. Health Serv Manage Res (1999) 14:27–35.
- 52. Richard G, Netemeyer W, Sharma S. Scaling Procedures: Issues and Applications. Thousand Oaks, CA: Sage Publications; (2003).
- Parasuraman AP, Zeithaml V, Berry L. SERVQUAL: A Multiple- Item Scale for Measuring Consumer Perceptions of Service Quality. J Retailing (1988) 69:140–7.
- 54. Bartlett MS. A Note on the Multiplying Factors for Various χ2 Approximations. J R Stat Soc Ser B (1954) 16(B):296–8.
- 55. Duc Thanh N, Su BC, Nguyen Ngoc N. Inpatient Satisfaction of the Quality of Medical Examination and Treatment Services at General Hospital of Krong Ana District, Dak Lak Province in 2017. J Health Development Stud (2018) 02(02/2018):50–7.
- Vietnam Ministry of Health. Decision on Guidance on Procedures for Medical Examination at Outpatient Departments of Hospitals (2013). Hanoi, Vietnam.
- 57. Naidu A. Factors affecting patient satisfaction and healthcare quality. Int. J. Health Care Qual. Assur. 2009;22:366–381.
- 58. Ajaegbu O.O. Access and Utilization of Prenatal Health Care Services in Rural Communities: A Study of Isiekenesi in Imo State. Int. J. Health Serv. 2017:47:795–806.
- 59. Thimbleby H. Technology and the future of healthcare. J. Public Health Res. 2013;2:e28.
- 60. Elley C.R., Kerse N., Arroll B., Robinson E. Effectiveness of counselling patients on physical activity in general practice: Cluster randomised controlled trial. BMJ. 2003;326:793.
- 61. Gu E., Page-Jarrett I. The top-level design of social health insurance reforms in China: Towards universal coverage, improved benefit design, and smart payment methods. J. Chin. Gov. 2018;3:331–350.
- 62. Budhwani H., Hearld K.R., Harbison H. Individual and area level factors associated with prenatal, delivery, and postnatal care in Pakistan. Matern. Child Health J. 2015;19:2138–2146.
- 63. Falah M.A. Females' satisfaction and perception about prenatal care services at primary health care centres. Int. J. Sci. Res. 2015;5:620–627.
- 64. Desalegn D.M., Abay S., Taye B. The availability and functional status of focused

- antenatal care laboratory services at public health facilities in Addis Ababa, Ethiopia. BMC Res. Notes. 2016;9:403.
- 65. Ajaegbu O.O. Access and Utilization of Prenatal Health Care Services in Rural Communities: A Study of Isiekenesi in Imo State. Int. J. Health Serv. 2017;47:795–806.