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MEASUREMENT OF ORGANIZATIONAL CULTURE IN HEALTH CARE UNITS – A LITERATURE REVIEW

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Purpose: The aim of this article is to review the national and international literature on the measurement of organizational culture in healthcare entities. The work focuses on identifying the most commonly used models, research tools, and methodological approaches used to analyze organizational culture and patient safety culture.
Design/methodology/approach: This article is a literature review. Polish and international scientific publications on organizational culture in healthcare were analyzed. They included empirical articles, review articles and descriptions of research tools. Qualitative and quantitative approaches to the topic were analyzed. Reviewed papers presented also research on standardized questionnaires and qualitative methods.
Findings: Literature analysis indicates that organizational culture is a key factor influencing the quality of healthcare services and patient safety. Both in Poland and globally, research using standardized quantitative tools predominates. At the same time, the lack of a single universal measurement instrument and the need to combine quantitative and qualitative methods are emphasized.
Practical implications: The review results can support healthcare management in selecting appropriate tools for diagnosing organizational culture. The article emphasizes the importance of systematically monitoring organizational culture as an element of quality and patient safety management and points to the need for conscious implementation of cultural changes in healthcare organizations.
Social implications: Researching and shaping a mature organizational culture in healthcare has significant social significance, as it influences patient safety, quality of care, and public trust in the healthcare system. Research on organizational culture supports the development of a culture of learning, open communication, and team accountability, which can contribute to reducing adverse events and improving working conditions for medical personnel.
Originality/value: This article summarizes the current state of knowledge on the measurement of organizational culture in healthcare, combining national and international perspectives. Its value lies in the compilation of research tools used and its analysis in the context of public healthcare entities. The work also highlights the need for further development of tools dedicated to the healthcare system in Poland.

Keywords: organizational culture, healthcare, patient safety, healthcare quality, literature review, measurement tools.
Category of the paper: Review paper.

1. Introduction

The healthcare system in Poland is undergoing transformation in the direction set by the Act of June 16, 2023, on Quality in Healthcare and Patient Safety. This legal regulation streamlines the rules for providing services and requires healthcare providers to implement internal quality management systems and monitor adverse events. Thus, the legislator has shifted the focus from the medical procedure itself to patient safety, making organizational culture a central element of effective healthcare facility management.

Organizational culture in healthcare is characterized by exceptional complexity resulting from the coexistence of numerous professional groups with differing norms and hierarchies. As Davies et al. (2000) point out, it can be analyzed as a social phenomenon based on relationships, but also as a measurable variable influencing clinical outcomes. In the era of new legal regulations, this complexity and the presence of subcultures (Scott et al., 2003) require a thoughtful research approach that will allow for the identification of cultural barriers that may hinder the achievement of statutory safety goals. In this context, the use of the Competing Values Model (OCAI) proves particularly valuable, allowing for the precise identification of organizational culture profiles (e.g., hierarchical or clan-based) and understanding how they impact quality processes (Świtała, Mościcki, 2016).

A significant challenge for quality in the context of the new law is the transfer of information between staff and patients. Jończyk (2011) rightly notes that patients, although often lacking the competence to assess the technical aspects of medicine, are precise observers of interpersonal relationships and service standards. In light of the statutory requirement to survey patient opinions, understanding this relationship becomes crucial for a comprehensive assessment of the quality of care.

The main goal of this study, inspired by the provisions of the law, is to analyze organizational culture as a mechanism for enhancing quality in healthcare and patient safety, thereby preventing adverse events. Transitioning from the archaic "blame culture" to the "just culture" promoted by modern standards and legislation requires the use of proven diagnostic tools. International literature highlights standardized questionnaires, such as the Safety Attitudes Questionnaire (SAQ) or the Hospital Survey on Patient Safety Culture (HSOPSC) (Sexton et al., 2006; Pronovost, Sexton, 2005), which allow for an objective assessment of an organization's condition. Researching organizational culture in the era of the new quality law is

no longer merely a theoretical research option but a necessity. It allows for the building of lasting safety foundations consistent with both current global trends and the stringent requirements of Polish law, ultimately translating into higher quality services and greater patient protection in the healthcare system.

2. Methods

This study is a literature review and focuses on the analysis of scientific achievements regarding organizational culture in healthcare institutions. The objective of the article was to identify the most commonly used research approaches, measurement tools, and key dimensions of organizational culture described in the literature. The literature review included scientific publications available in databases such as Scopus, Web of Science, PubMed, and Google Scholar. The literature search was based on a set of keywords in English and Polish, including: organizational culture, healthcare organizations, hospital culture, patient safety culture. The analysis included both Polish-language publications and foreign literature in English. The identified publications were subjected to qualitative analysis, including a comparison of definitions of organizational culture, research methods, and organizational contexts. Based on this analysis, a synthesis of the results was performed, which allowed for the organization of knowledge and the identification of dominant research trends and gaps in the literature.

3. Review of Polish Literature

3.1. Specificity of the Polish Healthcare System

The Polish healthcare system is based on an insurance model, in which the National Health Fund (pl Narodowy Fundusz Zdrowia, NFZ) serves as the primary payer. This single-payer dominance influences the specific operating conditions of healthcare providers, including limited market competition and strong administrative regulation. Healthcare providers in Poland are divided into public healthcare facilities (pl zakład opieki zdrowotnej, ZOZ), characterized by a high degree of formalization and bureaucratization; private healthcare facilities (niepubliczne zakłady opieki zdrowotnej, NZOZ) with greater organizational flexibility; and individual and group practices, primarily in primary care.

The system struggles with a number of structural problems that directly impact organizational culture: chronic underfunding that forces cost optimization, a shortage of medical personnel, excessive bureaucracy, long waiting lists for specialized services, and the growing demand associated with an aging population. These conditions determine the selection and adaptation of research tools used in Polish studies on organizational culture and healthcare quality.

3.2. Research in Polish Healthcare Facilities

3.2.1. Competing Values Framework in Polish Research

The most recent and comprehensive research on organizational culture in Polish healthcare facilities was conducted by Beata Domańska-Szaruga, Joanna Anna Jończyk, and Agnieszka Knap-Stefaniuk. The researchers applied the Competing Values Framework developed by Kim S. Cameron and Robert E. Quinn, using the OCAI (Organizational Culture Assessment Instrument) questionnaire.

The study, conducted in 2023, included 85 healthcare facilities (42 hospitals, 17 outpatient specialist care facilities, and 26 primary care facilities) and 372 respondents. The CATI (computer-assisted telephone interviewing) method was used. The results revealed the dominance of hierarchy and clan culture in Polish healthcare facilities, with a significant gap between the current and desired state. The desired direction of change indicates an increasing importance of clan culture at the expense of hierarchy culture and a slight increase in adhocracy culture (Domańska-Szaruga et al., 2024).

Joanna Jończyk's earlier research (2016-2017) focused on the relationship between organizational culture, human resources management in public hospitals, pro-innovation management, and negative behaviors of medical staff. This research identified barriers to innovation resulting from hierarchy culture and the potential of clan culture to support innovation.

Chuda (2017) presented a detailed method for diagnosing organizational culture using the Cameron and Quinn model, emphasizing the importance of dual measurement of the current and desired state. Świtała and Mościcki (2016) confirmed the high reliability of the tool, but the authors of the Polish study point to a significant methodological limitation. The Competing Values Model was developed primarily based on research on commercial organizations, which may not fully account for the specific characteristics of public entities. Domańska-Szaruga and co-authors (2024) advocate the development of research tools dedicated to entities operating in the public sphere, taking into account their cultural and organizational specificities.

3.2.2. Meyer and Allen's Organizational Commitment Scale

Polish studies on healthcare employee engagement utilize the Organizational Commitment Scale (OCS) developed by Meyer and Allen, which measures three components of commitment: affective (emotional attachment), continuance (awareness of the costs of leaving), and normative (sense of moral obligation).

Bańka, Wołowska, and Bazińska (2002) adapted and validated the Polish version of the scale using a sample of 261 employees from various professions, including medical personnel. Reverse-coded items were removed, retaining 18 items, six per component.

This scale was subsequently used in studies by Górniak (2016) on the relationship between organizational values and employee engagement, Motyka and Krzyżak (2020) examining the relationship between the satisfaction of psychosocial needs and organizational commitment, and Łaguna, Mielniczuk, and Wuszt (2015) analyzing the impact of commitment on various stages of the training process.

3.2.3. Proprietary Patient Satisfaction Questionnaires

Proprietary survey questionnaires, developed specifically for specific medical facilities, are widely used in Polish research. Jończyk (2011) developed a questionnaire consisting of 30 closed- and open-ended questions, focusing on non-medical aspects of healthcare. This assumption was made due to the strong information asymmetry in medical staff-patient relationships. Patients are not competent to assess strictly medical aspects, but they can objectively assess the facility's physical conditions, interpersonal relationships, waiting times, and compliance with patient rights. A pilot study was conducted on a sample of 30 patients at a hospital in the Podlaskie Voivodeship, using a five-point Likert scale.

Dziduch and Blicharz (2014) developed three separate questionnaires for different groups of respondents: employee satisfaction, hospital patients, and outpatient clinic patients. The employee satisfaction questionnaire covered 13 criteria, including material aspects (equipment, remuneration), organizational aspects (employment stability, atmosphere), relational aspects (collaboration), and developmental aspects (opportunities for development and improvement of qualifications). The study was conducted in a privatized medical facility on a sample of 130 respondents.

As Dziduch and Blicharz (2014) note, these proprietary tools have significant practical advantages. They can be adapted to the needs of a given facility and take into account specific local conditions. However, they are characterized by significant limitations: lack of psychometric validation, unknown validity, reliability, and sensitivity, and difficulty comparing results with other facilities (Dziduch and Blicharz, 2014).

Wroński and Bocian (2009) emphasize that despite the widespread use of proprietary questionnaires in Polish healthcare facilities, the primary goal of satisfaction surveys should be not only to measure satisfaction levels but also to understand the main determinants of satisfaction and dissatisfaction, to accurately identify patient expectations, and to identify the facility's strengths and weaknesses.

Świtalski, Wiśniewska, Jopek, Dykowska, and Czerw (2022) emphasize the importance of standardized questionnaires for monitoring safety culture in healthcare facilities. In addition to monitoring adverse events and patient satisfaction, these questionnaires are paramount in diagnosing the level of safety culture and implementing appropriate corrective actions.

3.2.4. Patient Request Form

Humeniuk, Pawlikowska-Łagód, Dąbska, and Mazurek (2018) used the standardized Patient Request Form (PRF), adapted from Zygfryd Juczyński's Polish version, to survey patients' expectations of their primary care physicians. The questionnaire contains 18 statements assessing expectations related to a medical visit, including the physician's involvement in explaining the disease, emotional support, information about diagnostic tests, medication instructions, course of treatment, prognosis, alternative treatment methods, side effects, and psychosocial aspects of the disease.

The study was conducted on a sample of 100 primary care patients in the Lublin macroregion, analyzing the relationships between demographic characteristics (gender, age, place of residence, education) and expectations. Despite international validation and Polish cultural adaptation, this tool has certain limitations – it only measures expectations without assessing their fulfillment and focuses on the individual visit, not taking into account long-term care.

3.2.5. Lean Management in Healthcare

Bukowska-Piestrzyńska (2018) and Szczerbak and Szczerbak (2024) present the concept of lean management as a method for streamlining operations in healthcare facilities. Lean healthcare, an adaptation of the Toyota Production System methodology, is based on eliminating waste in healthcare processes while maintaining or improving the quality of services. In the medical sector, waste includes errors requiring correction, unnecessary procedures, unnecessary patient transport, waiting times for admission, excess drug supplies, and lost employee creativity.

The basic lean tools in medicine include: value stream mapping (VSM), which identifies which stages of the treatment process create value for the patient; the 5S method, which ensures workspace organization and reduces infections; kaizen, which engages staff in continuous improvement; poka-yoke, which reduces the risk of medical errors; and the kanban system, which manages inventory (Szczerbak, Szczerbak, 2024).

Graban (2011), in the Polish edition of "Lean Hospitals" defines lean as a management system, a method of continuous improvement, and a way to solve problems relevant to all levels of a medical organization. Implementing lean in medical facilities contributes to increased savings, improved treatment quality, and enhanced patient safety, although it is associated with barriers: lack of staff awareness, resistance to change, and concerns about the impact of change on safety.

3.2.6. Case Study and Qualitative Methods

Frankowska and Głowacka (2012) used a case study method to analyze the organizational culture in two medical facilities: a complex of specialist laboratories in a public hospital and a privatized district hospital. The analysis covered levels of organizational culture according to Schein's model (assumptions, norms and values, artifacts), management styles, and relationships between employees and patients. This method, despite limitations in generalizing the results, allows for deep insight into the studied phenomenon and consideration of the organizational context.

4. Review of the International Literature

Organizational culture in healthcare facilities is an important topic of international research. Researchers analyze how organizational culture influences the functioning of hospitals and clinics, the behavior of medical staff, and the quality and safety of patient care. Organizational culture is a complex phenomenon that is difficult to define unambiguously, making its measurement difficult (Davies et al., 2000). In healthcare, organizational culture can be studied in two ways. The first, qualitative, approaches it as a phenomenon resulting from professional norms, relationships between employees, and the specific characteristics of individual professional groups within hospitals. The second, quantitative, approaches organizational culture as a variable that can be measured using questionnaires and explores its relationship with other factors, such as quality of care or management style (Davies et al., 2000). Both qualitative and quantitative approaches are used in empirical studies that utilize the research methods discussed below.

4.1. Safety Attitudes Questionnaire

The Safety Attitudes Questionnaire (SAQ) is the most commonly used tool for measuring safety culture in healthcare (Sexton et al., 2006). This questionnaire originated from the Flight Management Attitudes Questionnaire (FMAQ) in civil aviation, where it was widely used. Twenty-five percent of the FMAQ questions were used in the healthcare setting, and 75% were new questions developed through discussions with healthcare professionals and experts (Sexton et al., 2006). The SAQ consists of approximately 60 questions rated on a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree), grouped into six dimensions: teamwork climate, safety climate, management, job satisfaction, working conditions, and stress (Sexton et al., 2006). The tool has been adapted to various clinical areas through minor modifications reflecting the specificity of the area. Versions have been developed for intensive care units (ICUs), operating rooms (ORs), inpatient wards, and outpatient clinics (Sexton et al., 2006). A study using the SAQ, including 10,843 respondents from 203 clinical units conducted in three

countries (USA, UK, New Zealand), found a Raykov's ρ of 0.90, indicating strong reliability of this measurement tool. Other analyses of the SAQ have shown test-retest reliability of 0.85-0.90 and Cronbach's alpha values of 0.75-0.88 (Pronovost, Sexton, 2005). A key methodological aspect of the SAQ is the measurement of safety culture at the clinical unit level, not the entire hospital level. As Pronovost and Sexton (2005) demonstrated, in a study of 100 hospitals, "the variance between units within a hospital is greater than the variance between hospitals". In one hospital, the level of positive safety climate varied from 0% to 100% between different clinical units. Sexton et al.'s (2006) study achieved an overall response rate of 67.0%, with a range of 65.7% to 72.2% across units. Pronovost and Sexton (2005) emphasize that when response rates fall below 60%, the data represent opinions rather than culture and the results should be used with caution. The data were analyzed using factor analysis within clinical units. For each of the six factors, scores were calculated at both the between-area and within-area levels (Sexton et al., 2006).

4.2. Denison Organizational Culture Survey

Denison Organizational Culture Survey is one of the frequently used quantitative tools in research on organizational culture in the healthcare sector. One example of its application in the international literature is the empirical study conducted by Vahedi et al. (2024), which aimed to analyze the relationship between leadership competencies, organizational culture, and the quality of healthcare services in a hospital unit. In the aforementioned study, organizational culture was measured using the standardized Denison questionnaire, consisting of 36 items rated on a five-point Likert scale. The tool was applied in a classic four-dimensional framework, encompassing involvement, consistency, adaptability, and mission. Each dimension was analyzed as an area composed of three sub-dimensions, enabling a multifaceted assessment of the organizational culture of the studied healthcare unit (Vahedi et al., 2024). The involvement dimension referred to the degree of employee motivation, teamwork, and the development of staff competencies. Cohesion encompassed shared organizational values, understanding, and coordination of internal activities. The adaptation focused on the organization's ability to learn, respond to change, and focus on the needs of healthcare recipients. The mission focused on the clarity of strategic goals, vision, and direction of the organization's development. This structure of the tool allows for the simultaneous assessment of organizational culture in both operational and strategic dimensions. The study authors confirmed the high reliability of the tool, obtaining a Cronbach's alpha coefficient of 0.92 for the entire organizational culture scale. The obtained results indicated significant relationships between organizational culture and the quality of healthcare services, confirming the usefulness of Denison's tool in empirical research conducted in the healthcare sector (Vahedi et al., 2024). The presented research tool illustrates the dominant trend in the global literature of quantitative measurement of organizational culture in healthcare facilities using standardized questionnaires. At the same time, in light of the critical approaches to

organizational culture found in the literature, the results of such studies should be interpreted taking into account the complexity and multidimensionality of the phenomenon being studied (Davies et al., 2024).

4.3. Stanford PSCI Culture Survey

Singer et al. (2003) developed the Stanford PSCI Culture Survey by systematically adapting five previously validated instruments: the OR Management Attitudes Questionnaire, the Anesthesia Work Environment Survey, the Naval Command Assessment Tool, the Risk Management Questionnaire, and the Safety Orientation in Medical Facilities. The study included 15 hospitals in California (6312 employees, 47.4% response rate). The authors employed a three-phase process to adapt the instrument:

1. The initial survey questionnaire was extensively tested in pilot studies at the facilities before implementation in hospitals (Singer et al., 2003).
2. After modification, a questionnaire containing 82 questions plus demographic information was created (Singer et al., 2003).
3. Finally, a shortened version (30 questions plus demographic information) was created by eliminating overlapping questions while retaining at least one, usually two, questions for each of the 16 areas (Singer et al., 2003).

4.4. Hofstede's Model

Hofstede et al. (1990) presented the most comprehensive methodological approach, combining in-depth qualitative methods with quantitative analysis. The study covered 20 organizational units from 10 different organizations in Denmark and the Netherlands. The three-phase research model consisted of three phases:

Phase 1 – In-depth Interviews: in the first phase, in-depth interviews lasting two to three hours each were conducted with nine respondents per unit, for a total of 180 interviews. These interviews allowed us to obtain a qualitative understanding of the unit's cultural climate and gather themes for inclusion in the subsequent survey questionnaire (Hofstede et al., 1990).

Phase 2 – Interview-Based Survey. In the second phase, a standardized questionnaire containing 135 questions was used. Approximately 60 questions in the survey were taken from an earlier international research project and its subsequent extensions; the remaining questions were developed based on interviews and addressed issues that the interviewers considered to differ significantly between individuals. Validation of the Value-Behavior Distinction The distinction is present not only in the researchers' conception but also in the minds of the respondents. In a factor analysis of all 135 survey items for all 1295 respondents, the value items and behavior items consistently indicated different factors with very little overlap (Hofstede et al., 1990).

Phase 3 – Unit-Level Data: in the third phase, questionnaires followed by personal interviews were used to collect data at the unit level as a whole regarding factors such as staff numbers, budget composition, key historical facts, and key managerial data (Hofstede et al., 1990).

4.5. Studies in the AHRQ Hospital Survey on Patient Safety Culture (HSOPSC)

The AHRQ Hospital Survey on Patient Safety Culture (HSOPSC) is another widely used research tool. As Weaver et al. (2013) write in their systematic review of 33 studies on safety culture, 10 studies used the AHRQ Hospital Survey on Patient Safety. This tool focuses on 12 dimensions of safety culture and is widely used in the United States to assess safety culture in healthcare.

4.6. Manchester Patient Safety Framework (MaPSaF)

The Manchester Patient Safety Framework (MaPSaF) presents a qualitative approach to assessing safety culture. As described by Mannion and Davies (2018), the Manchester Patient Safety Framework is a qualitative tool that aims to provide insight into safety culture and how it can be improved across teams and organizations. The tool examines nine dimensions of patient safety and describes what an organization would look like at different levels of patient safety. The assessment is conducted in workshops, and the assessments can be used to reflect, discuss, and understand the organization's strengths and weaknesses. Mannion and Davies (2018) explain the methodological difference between quantitative and qualitative approaches to examining organizational culture as the following: while both perspectives use assessment tools, they do so differently. The former, e.g., the SAQ or HSOPSC, emphasizes quantitative measurement to identify goals, change, and track progress, while the latter, the MaPSaF, uses qualitative, more descriptive methods to stimulate reflection, learning, and collaborative action.

Also noteworthy is the 2003 article by Tim Scott, Russell Mannion, Huw Davies, and Martin Marshall, titled *The Quantitative Measurement of Organizational Culture in Health Care: A Review of the Available Instruments* (Scott et al., 2003). It reviews the international literature on quantitative methods for measuring organizational culture (OC) in healthcare. The information contained therein reflects the state of knowledge and available measurement tools from over twenty years ago, which should be taken into account when analyzing contemporary research. The authors reviewed the literature published up to June 2001, identifying thirteen instruments (Scott et al., 2003):

- Competing Values ramework (CVF).
- Quality Improvement Implementation Survey.
- Organizational Culture Inventory (OCI).
- Harrison’s Organizational Ideology Questionnaire.
- Hospital Culture Questionnaire.

- Nursing Unit Cultural Assessment Tool (NUCAT).
- Practice Culture Questionnaire.
- MacKenzie's Culture Questionnaire.
- Survey of Organizational Culture.
- Corporate Culture Questionnaire.
- Core Employee Opinion Questionnaire.
- Hofstede's Organizational Culture Questionnaire.
- Organizational Culture Survey (Scott et al., 2003).

The authors of the 2003 article reached several key conclusions that remain relevant today:

1. Researchers seeking the "ideal" instrument for measuring organizational culture in healthcare may be frustrated because all available instruments have limitations (Scott et al., 2003).
2. The choice of instrument should depend on how researchers define culture, the purpose of the study, and available resources (Scott et al., 2003).
3. The authors suggest that no single instrument will provide a valid, reliable, and trustworthy assessment of organizational culture (Scott et al., 2003). For this reason, an approach combining quantitative methods (questionnaires) with qualitative methods (interviews, observations) is optimal, allowing for the examination of various layers of culture, such as artifacts, values, and implicit assumptions (Scott et al., 2003).
4. Effective research requires consideration of professional subcultures and an adequate sample size, especially if the goal is to analyze the statistical relationship between culture and quality (Scott et al., 2003).

5. Discussion

Summing up, a review of the Polish literature indicates a growing interest in methods for measuring organizational culture in healthcare entities, with the simultaneous dominance of tools derived from commercial organizations. Cameron and Quinn's OCAI model is the most frequently used standardized tool, although researchers advocate the need to develop instruments specifically tailored to the specific needs of public healthcare entities (Domańska-Szaruga et al., 2024).

In the area of employee engagement, the Polish adaptation of the Meyer and Allen scale is a reliable and widely used tool. A parallel tradition of proprietary satisfaction questionnaires is developing, offering flexibility but characterized by limitations in psychometric validation and cross-organizational comparisons.

Directions for further research include: mechanisms of cultural transformation in healthcare entities, the impact of culture on organizational effectiveness and the ability to innovate, cross-cultural management, and the relationship between organizational culture, risk management, and patient safety (Domańska-Szaruga et al., 2024; Jończyk, 2017). A key aspect is the development of research tools that take into account the specificity of the Polish healthcare system and the public mission of medical entities.

A review of the international literature shows that researchers have developed numerous instruments to measure organizational culture in healthcare. The most commonly used are quantitative questionnaires, such as the Safety Attitudes Questionnaire (SAQ), the Denison Organizational Culture Survey, and the AHRQ Hospital Survey on Patient Safety Culture (HSOPSC). Qualitative tools, such as the Manchester Patient Safety Framework (MaPSaF), also exist for in-depth analysis of safety culture. Researchers note that there is no single ideal tool for measuring organizational culture. All research methods described in the literature have their limitations (Scott et al., 2003). The choice of method should depend on the study's purpose and available resources. The best results are achieved by combining quantitative and qualitative methods, which allows for the examination of various layers of organizational culture. It is also important to consider professional subcultures occurring in medical facilities and ensure an adequate sample size (Scott et al., 2003).

The literature review not only provided a synthetic summary of the tools used to measure organizational culture in healthcare but also identified significant research gaps and directions for further analysis. The new contribution of this study is the organization and comparison of solutions used in Polish and international studies.

The literature analysis confirms the findings of other authors, according to which there is no single universal tool for comprehensively measuring organizational culture in healthcare. As in international studies, Polish studies also tend to be dominated by a quantitative approach based on standardized questionnaires, while qualitative methods are insufficiently utilized. A difference visible in the national context, however, is the relatively limited number of tools created specifically for public healthcare entities. This distinguishes the Polish reality from some healthcare systems in Western countries, where more specialized research instruments are being developed.

The conclusions drawn from this review indicate that further development of research on organizational culture in healthcare should focus on designing tools that take into account the systemic context, the public mission, and the complexity of professional relationships within healthcare facilities. Combining quantitative and qualitative methods seems particularly important, allowing for a better understanding of both declared employee attitudes and implicit organizational norms, values, and practices.

In light of the presented analyses, it can be concluded that the research objective was achieved, and the results support the need for further research in this area. Future research plans should include empirical validation of the proposed tools in various types of healthcare

facilities, analysis of the relationship between organizational culture and clinical outcomes, and in-depth comparative studies between healthcare systems in different countries. This approach can contribute to a better understanding of the role of organizational culture as a factor supporting the quality, safety, and efficiency of healthcare facilities.

6. Conclusions

This article addresses the topic of organizational culture in healthcare facilities. The authors conducted a literature review on the measurement of organizational culture in healthcare. The first part of the review cited articles related to research in Polish healthcare facilities, while the second part focused on solutions found in international publications. The results of the review of Polish and international literature suggest that organizational culture is a key factor in determining the quality of healthcare and patient safety. Currently, there is a shift away from a "blame culture" towards a "learning culture". Such changes are associated with the use of appropriate methods and tools, which are described in the relevant literature.

A culture of hierarchy and clan culture dominates Polish healthcare facilities. At the same time, a discrepancy between the current and desired state is indicated. There is also potential for change toward greater employee participation, teamwork, and support for innovation. However, implementing change is not easy; it takes time, and it is worth emphasizing that resistance to change is a natural phenomenon. The review results reveal a growing interest in methods for measuring organizational culture, with Cameron and Quinn's OCAI model being the most commonly used tool. However, based on the literature analysis, it can be concluded that there is a need to develop instruments specific to public healthcare facilities that take into account the characteristics of the Polish healthcare system.

Regarding the review of the international literature, considerable methodological maturity was noted in research on organizational culture in healthcare. Standardized quantitative tools such as the Safety Attitudes Questionnaire, the Denison Organizational Culture Survey, and the AHRQ Hospital Survey on Patient Safety Culture are most frequently used. These enable comparability of results and monitoring of changes over time. Quantitative methods should be supplemented with qualitative methods, which will allow for capturing deeper layers of organizational culture.

A significant conclusion drawn from the literature review is the lack of a single universal instrument enabling an in-depth and reliable assessment of organizational culture in healthcare facilities. A mixed-method approach, combining standardized questionnaires with qualitative methods, offers the greatest cognitive value. Developing research tools that take into account the specific characteristics of public entities in the context of the Polish healthcare system seems particularly important. Systematic research on organizational culture is crucial for quality

management and safety in healthcare. Therefore, it is justified to conduct research on developing a tool that will allow for the measurement of organizational culture in healthcare facilities and then apply it in practice.

The research demonstrates certain limitations. The analyzed articles examine only selected aspects of organizational culture, as it is difficult to capture deeper, informal aspects of organizational culture, such as unwritten norms, power relations, or professional subcultures. Organizational culture encompasses more elements. Furthermore, many studies are characterized by small sample sizes, a lack of comparative analyses, and limited validation of the developed measurement tools. The international literature also highlights the difficulties in comparing results between countries due to systemic, cultural, and organizational differences, which poses a significant methodological challenge.

At the same time, the review adds new cognitive value by organizing the current state of knowledge and revealing both similarities and differences between studies conducted in Poland and abroad. The accumulated knowledge can be further utilized in both empirical research and management practice, supporting the development of systemic solutions in the area of organizational culture in healthcare.

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