Sistematik Derleme

SAĞLIK HİZMETİ ÖRGÜTLERİNDE ÖRGÜT KÜLTÜRÜ: BİR SİSTEMATİK TARAMA

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ÖZET

Arka Plan ve Amaçlar: Örgüt kültürü, çevreden gelen taleplerin karşılanması ve örgüt bünyesindeki değişimlerin yönetilmesi süreçlerinde, insanların örgüt içerisindeki davranışlarının anlaşılmasında önem arz etmektedir. Örgüt kültürünün tanımlanarak anlaşılmasına ve optimal örgütsel performansa erişilmesine engel olduğunda değiştirilmesine yönelik giderek artan bir ilgi söz konusudur. Sağlık hizmetlerinin sunulduğu çevreye, bu çevrenin bireysel ve örgütsel çıktıları nasıl etkilediğine yönelik ilgi yetersiz durumdadır. Yeni bir sağlık hizmetleri sistemi tasarımı ya da reform hayata geçirilmeden önce, örgüt kültürünün hangi faktörler tarafından şekillendirildiğinin farkında olmak esastır. Bu çalışma sağlık hizmeti örgütlerinde, örgüt kültürünün hangi bağlamlarda ele alındığını değerlendirmeyi amaçlamaktadır. **Yöntem:** Araştırma, 2008-2018 yılları arasındaki zaman dilimi için Emerald, Ebsco-host, Google Akademik, PubMed ve Science-Direct veritabanlarında gerçekleştirilmiştir. Tarama sürecine yol gösteren araştırma sorusu "Sağlık hizmeti örgütlerinde örgüt kültürünün çalışılması hangi bağlamlarda önem arz etmektedir?" şeklinde ifade edilebilir. Daha önceden belirlenmiş kriterleri karşılamayan çalışmalar kapsam dışında bırakılmış, uyum sağlayanlar ise sonrasında daha derinlemesine incelenmek üzere listelenmiştir. Nihai analiz aşamasına 21 makale dahil edilmiştir. **Bulgular:** Çalışmalarda sağlık hizmetlerinin sunulduğu farklı ortamlar ele alınmıştır. Son analiz aşamasında 21 makale çalışma kapsamına dahil edilmiştir. İlgili çalışmalardan 17'si kantitatif, ikisi kalitatif ve biri karma yöntemlerle gerçekleştirilmiş olup iki çalışma ise örgüt kültürü ölçüm araçlarının tasarlanması üzerinedir. **Sonuç:** Sağlık hizmeti sunumunda mükemmellik, çok disiplinli ekip yaklaşımı aracılığıyla sunulan pozitif değer sistemleri, stratejik katılımın sağlanması ve kaliteli hizmet sunumunda optimum verimlilik üzerinde etkili olan en önemli kültürel yansımalar ile ilişkilendirilmiştir. Bu sağlık hizmeti araştırmaları üzerinde gerçekleştirilen örgüt kültürü değerlendirme çalışması, ilerleyen yıllarda sağlık hizmeti çevrelerinin ve klinik performans üzerindeki etkilerinin derinlemesine anlaşılmasında ve planlanan hedeflere ulaşılmasında rol oynayacaktır.

Anahtar Kelimeler: Örgüt kültürü, sağlık hizmeti örgütleri, hastaneler

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ORGANIZATIONAL CULTURE IN HEALTH CARE ORGANIZATIONS: A SYSTEMATIC REVIEW

ABSTRACT

Background and Objectives: Organizational culture is important in understanding people's behavior in organizations when managing external demands and internal social changes. There has been an increasing drive to understand and address the organizational culture and try to change it where optimal health performance is hindered. Insufficient attention has been given to the environment of health care and how it can influence individual and organizational results. Before trying to implement any new health care redesign or reform, it is essential to be aware of what characterizes their organizational culture. This study aimed to assess to which extent the organizational culture domain has been mentioned in the health care settings. **Method:** The search was performed in the Emerald, Ebsco-Host, Google Scholar, PubMed and Science-Direct databases for the time period 2008–2018. The research question that guided this review was posed as: "How it is important to study organizational culture in health care settings". Studies that did not meet the predetermined criteria were excluded, while those that complied with the inclusion criteria were listed and further reviewed. Twenty-one articles were included in the final analysis of this study. **Results:** Diverse health care settings were represented in the studies. Twenty-one articles were included in the final analysis of this study. Among the relevant studies, 17 were research articles; 12 were quantitative studies, 2 were qualitative, one mixed method study and 2 were Organizational culture measurement tools design articles. **Conclusion:** Excellence in health care delivery is linked to positive value systems delivered through a multidisciplinary team approach and the use of strategic involvement, the most important cultural organizational influences for optimum efficiency in the delivery of quality care. The future use of this organizational culture assessment in health care studies that seek to understand health care systems deeply and its influence on clinical performance, will play an essential role in achieving their planned targets.

Keywords: Organizational culture, health care organizations, hospitals

INTRODUCTION

The concept of organizational culture (OC) originates from different disciplines including anthropology, sociology and management (Thomas et al., 1990). Recent interest in the health care culture has begun to address the importance of culture for key organizational results (Zazzali et al., 2007). For example, health care cultures that emphasize group identity, teamwork and coordination have been linked to better quality improvement practices (Shortell et al.,1995). According Rundall et al. (2002), the culture of medical organizations is important in the treatment of diseases, as it may relate to the ability of these organizations to support quality improvement efforts and to develop information systems to provide better patient care. Other authors have investigated how employee attitudes and behaviors are influenced by the " fit " or congruence between the culture of the organization and individual values or beliefs about the values of the organization. Different studies have found that greater congruence is linked to more positive attitudes of employees. However, there are several OC definitions in the literature. According to O'Reilly and Chatman (1996), " culture is a system of shared values that define important attitudes and behaviors that guide the attitudes and behaviors of its members. " As Schein (1985) proposed: " OC is the pattern of common basic assumptions-invented, discovered or developed by a particular group as it learns to deal with its problems of external adaptation and internal integration-that worked well enough to be considered valid and therefore to be taught to new members as the right way of perceiving, thinking and feeling in relation to them. A variety of qualitative and quantitative approaches measure OC according to the purpose and objectives of each investigator (Scott et al., 2003a).

OC and behavior can therefore be seen as a patterned system of organizational perceptions, meanings and beliefs that facilitates the creation of meaning among a group of people who share common experiences and who guide individual behavior in Bloor and Dawson 's work (1994). Change management literature promotes the idea that collective behavior requires distancing itself from group patterns or habits or replacing existing behavioral patterns (habits) with new ones, more explicitly. It is logical to assume that a number of intermediate variables such as mind-set, values, attitude, knowledge and practices must be introduced in order to modify the OC. These new variables will ultimately help to address the variance between OC and behaviors (De Bono et al., 2014).

In the forthcoming health system reform, health care professionals will face both organizational and professional challenges. As clinicians, researchers and policy makers, they seek to intervene

in hospital culture as a way to improve the performance of health care settings. This can serve as background knowledge for leaders and policymakers who seek interventions to improve performance before implementing a new national health care system. Whatever interventions are taken, policymakers should ensure that important values promoted in health care are well preserved (Zachariadou et al., 2013).

Organizational Culture Assessment and Change

Health care has evolved rapidly and has led to significant changes in the organizational and practice environment (Rider et al. 2018). Organizational theorists stressed the importance of knowing culture in an organization in order to achieve success in changing processes (Denison, 1996; Hemmelgarn et al., 2006). Nonetheless, health care organizations are considered hard to change. There are several examples of how slow routines and long wait times are caused by organizational inertia (Street and Blackford 2001; Scott et al. 2003b). The complex and costly care is a critical challenge facing health care systems worldwide. To meet this challenge effectively, health care systems must reorganize organizations to better accommodate treatment services as a central goal of care (Palmqvist and Lindell, 2000; Olofsson et al., 2009). However, new working models and new technologies have been hampered by cultures that resist changing processes (Benders and Van Hootegem, 1999).

Elving (2005) has shown that a communicative culture and a sense of community belonging have a positive effect on the readiness for change. Although culture development is driven by professionals who share similar values and objectives (Edmondsson, 2003), hospital wards develop their own culture (Michie and Williams, 2003). This points to the need for wide cooperation and awareness of common values and ideologies in changing processes (Schlenker and Weigold, 1992). A greater understanding of OC as an important factor in changing processes will influence the selection of hospital wards in changing schemes, as the underlying culture of an organization is considered to have a significant impact (Fischer et al., 2005). It considered as an instrument that identifies the conditions of a specific health care setting that can improve the results of a change plan.

In some countries, a multidisciplinary team has therefore developed and validated a dimensionally OC questionnaire for health care settings. There is no doubt that action in the health department must focus on the group, its internal harmony and the integration of professionals within the group (Alharbi et al. 2012). Some tools are suitable for an overall evaluation of the ward

culture for team training and could be a powerful trigger for improving management and clinical performance. In addition to being an intervention evaluation tool for research purposes, some provide an operational tool for accurate and comprehensive management and organizational diagnosis at the ward level, enabling priorities for change to be identified to improve attitudes, efficiency and performance.

Therefore, it is essential that health managers be aware of the characteristics of their OC before they try to implement any new model of health care. The questionnaire on organizational values can be used as a tool to help health managers achieve this understanding. However, because of the resistance to change, it should be temporarily transformed into a culture that values flexibility to facilitate the process of change (Carlström and Ekman, 2012).

Organizational Culture and Its Association with The Culture of Error Reporting, Quality and Patient Outcomes

A review of the evidence concerning health care, based on the general theories of OC, shows that OC has a significant impact on the quality of care and patient safety (Wakefield et al., 2001). Similarly, there is compelling evidence that burnout doctors will show sub-optimal care for their patients (Shanafelt et al., 2002) and have even been linked to serious errors and deaths (Firth-Cozens and Greenhalgh, 1997). There is a direct connection between the working conditions of doctors and the hospital stay of patients. Simply agreed, the culture of hospitals has a significant impact on the way doctors function and therefore on the treatment of patients. The connection between OC and quality strongly suggests that a more comprehensive approach to improving care quality can be achieved by attempting to conceptualize these variables (Montgomery et al., 2010).

Schein's approach to OC also allows for significant differences between embraced values and underlying assumptions, and this again has a resonance for hospitals where differences between these two levels can be projected into the experience of the patient (Montgomery et al. 2010). The reluctance of hospital doctors to adopt guidelines for best practice is an example of how OC can influence the practice. Research on best practice, for example (Cabana and Kim, 2003; Cabana et al., 1999), shows that the failure to adopt guidelines relates to the inability to overcome previous practice approaches, expectations of outcomes and self-efficacy among physicians, all informed by OC. The OC and values have shown that medical errors (Khatri et al. 2007), hospital errors (Stock et al. 2007) and safety concerns (Belohlav et al.,2010)are being reduced. In addition, the absence of formal error tracking systems, especially for the developing world, increases the importance of

maintaining a voluntary error reporting culture to ensure patient safety (Williams, 2007). It is known that a favorable error reporting culture is closely linked to a positive OC(Williams et al. 2007). When physicians are facilitated by a positive organizational culture, their commitment to a culture of reporting and sharing errors increases, thereby improving patient safety and reducing mortality rates (Kwak et al., 2010 and Aiken et al., 2012). World Health Organization (WHO) also indicates that the hospital's OC influences job satisfaction, role delivery and quality of patient care for health care professionals (Sorra and Dyer, 2010). It will be important to invest time and resources in training the culture of health workers towards a more progressive culture of non-blame and to encourage a culture of reporting errors among employees (Jafree et al. 2015). A quality-oriented environment should be equivalent to fewer medical errors, better reporting of errors and fewer cases of suboptimal patient care. A true quality orientation would therefore require substantial organizational attention to the development, implementation and monitoring of error reduction mechanisms (McCray et al., 2008). Such objectives can only be achieved through an approach designed to address systemic problems within the OC (Montgomery et al., 2010).

Research has been carried out in a variety of countries, mainly in North America, Europe and Australasia, across multiple health care settings, mainly hospitals. The studies themselves involved nuanced choices in types of measures, multiple mechanisms for studying or intervening in order to improve culture and varying ways to report their methods and results. For previous work we have found confirmatory evidence (Parmelli et al. 2011, MacDavitt et al. 2007, Scott et al. 2003) suggesting that positive links exist between health care cultures and patient outcomes. The Institute of Medicine (IOM) in the USA has repeatedly highlighted the link between patient safety, physician well-being and organizational culture (Institute of Medicine, 1999 and2001). In short, health care organizational and workplace cultures are related to patient outcomes, as people have generally assumed, and in the positive direction our hypothesis suggested (Braithwaite et al. 2017).

Organizational Culture and Its Implications for Infection Prevention and Control in Health care Institutions

Infection prevention and control interventions in one hospital are not uncommon but fail or have significantly less success when implemented in another health care institution. It has been postulated that organizational factors are a major reason. As a result, in recent years there has been an increasing drive to understand and address the OC in order to improve the performance of health

care. Well-designed and tailored initiatives for OC change can have a positive effect on infection prevention practices such as hand hygiene. OC change seems promising, but challenging, both from a theoretical perspective and from the results of the few studies available (De Bono et al.,2014).

Infections associated with health care continue to pose a major challenge to health care institutions with regard to patient mortality and morbidity and unnecessary financial expenditure (de Kraker et al., 2011). Differences in the OC can explain a variation in compliance with guidelines. Staff engagement and hospital management (both key components of OC) were significantly linked to higher levels of knowledge, higher levels of reporting compliance with hand hygiene. A significant reduction in the incidence infections were demonstrated by effective prevention and control of infection interventions in hospitals and health care organizations (Thompson et al., 2009). However, attempts to introduce it in other health care institutions have often failed to replicate success using a similar methodology (Giannitsioti et al. 2009). Gould et al. (2007) Attribute this discrepancy to the OC and suggest that much of the success in Geneva should be attributed to the attention given to contextual factors within the organization that have encouraged the use of hand rub, in particular the hospital - wide ownership of the initiative by managers and senior health professionals. OC appeared as a method for improving the quality of health care in England and the United States in the new millennium (Davies et al. 2000). In the context of endemic variables, OC variables are important predictors of the reported compliance of health workers with infection control practices. Staff engagement was positively linked to the reporting of contact precautions and positive attitudes of staff. It is therefore not surprising that in recent years an increasing emphasis has been placed on the need to understand OC and try to change it, where it is found to hinder optimal health care performance, including infection prevention and control practices (Davies et al., 2000).

Health care Technologies and Hospital Organizational Culture

Knowledge management practices are now widely recognized as a competitive advantage, and more companies have integrated their organizations with knowledge management strategies (Ambrecht et al. 2001; Jackson and DeTienne, 2002). In order to be successful and competitive in the development of e-health, organizations and leaders must consider adaptive and intelligent

strategies, including processes and practices for knowledge management. Many opinions and developments have developed through knowledge management.

To implement new technology in an organization, communication in line with their organization culture plays a significant role. The OC, with its values, influences the desire for a response to information that is collected and transformed through external and internal communication channels and transformed into organization. When a new technology system is introduced, the reaction of the individual employees is different. The more empathy is generated the more likely can be arranged smoothly and efficiently (Davenport and Prusak 1998). Meanwhile, culture provides " cognitive maps " through its myths, sagas and organizational stories that help organization members focus on organizational interactions and technological development (Daft and Weick, 1984).

Lawson's research indicated that knowledge management is a continuous process andspirally expands as knowledge increases over time. Lawson's study combined and refined processes of three studies, Wiig (1997), Parikh (2001), and Horwitch and Armacost (2002), to develop the six dimensions described in a knowledge management cycle: knowledge creation, capture, organization, storage, dissemination, and application. This indicated that organizations that actively implement knowledge management as a strategic advantage must make different use of all six of these processes (Lawson, 2004). Furthermore, a supporting culture advocates managers and staff to realize the role of knowledge flow in their organization success and emphasizing knowledge sharing as an vital factor in the Knowledge management programs.

MATERIALS AND METHODS

This systematic review was designed and conducted in line with the published guidelines for reporting systematic reviews, peer-review and research articles. Systematic review of the existing literature on OC of health care settings was performed. The main review question was:

"How it is important to study OC in health care settings?". A systematic, comprehensive bibliographic search was carried out in the Emerald, Ebscohost, Google Scholar, Pub Med and Science Direct databases for the time period between 2008–2018. Search terms "organizational culture"; and "Health care settings" or "Hospitals".

Four major inclusion criteria were adopted according to Prisma Method (Moher et al., 2009) (Figure 1):

- Published papers in peer-reviewed journal

- Papers with full access possibility
- Papers written in the English language
- Papers published from 2008 to 2018 (focus on more recent Knowledge)

Studies that did not meet the above criteria were excluded, while those that complied with the inclusion criteria were listed and further reviewed. Studies were evaluated and critically appraised. Literature screening (a three-stage approach-exclusion by reading the title, the abstract, and the full text) and extraction of the main findings from each retrieved study. The following information was extracted from each one of the included studies (Table 1): Title, authors and year of conduction, country, study design, subjects, research purpose, and main findings.

Bibliographic Search

A total of 137 records were retrieved through our searches in Emerald, Ebscohost, Google Scholar, PubMed and Science Direct databases. Following reading the titles and abstracts of the retrieved records 26 remained for further evaluation. Another 5 articles were excluded after reading the full article. Figure 1 shows the exact sequence and process of study identification, selection and exclusion in each step of the search. Finally, 21 studies were considered to be appropriate for answering our primary research question.

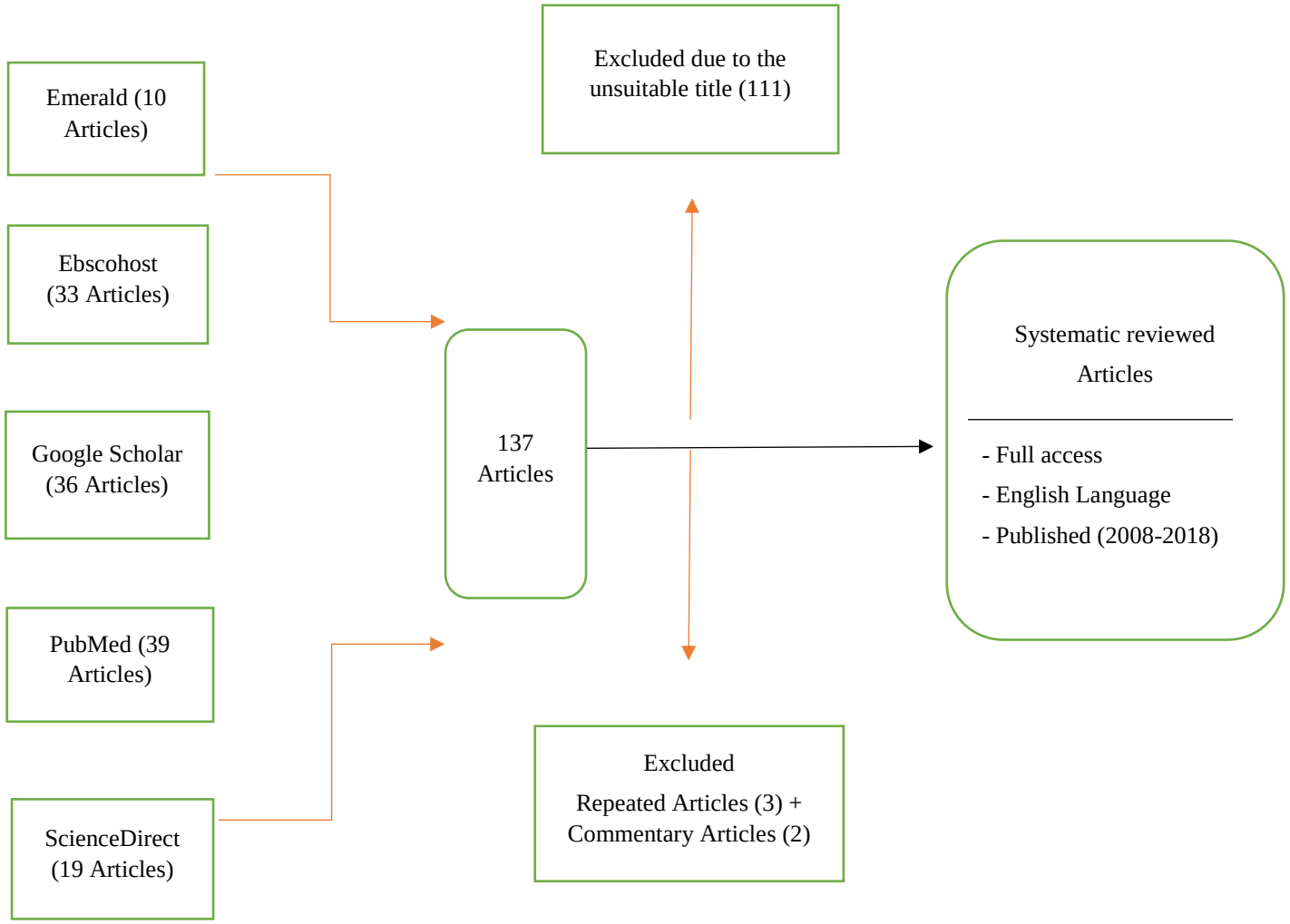

Figure 1. Prisma flowchart

Table 1. An overview of studies' characteristics and main findings

Author et al. (year)	Main Study Characteristics	Aim of the Study	Main Findings
Braithwaite J et al., (2017)	**Australia,** A variety of health care facilities. 204 articles 62 articles were included	Synthesising the evidence on the extent to which organizational and workplace cultures are associated with patient outcomes.	The majority of studies (84%) were from North America or Europe, and conducted in hospital settings (89%). They largely quantitative (94%) and cross sectional (81%).The review identified four interventional studies. Positive organizational and workplace cultures were consistently associated with a wide range of patient outcomes such as reduced mortality rates, falls, hospital acquired infections and increased patient satisfaction.
Tyagi et al., (2013)	**Canada,** A cross-sectional study	To identify whether the ability to implement health care technology by a hospital was related to usage of quality improvement programs within the hospital and whether the culture within a hospital plays a role in the adoption of quality improvement programs.	Model analysis (Rasch) revealed that a hierarchy existed among the health care technologies based upon the difficulty of implementation. Culture within a hospital served a mediating role in quality improvement programs adoption.
Grueso-Hinestroza et al., (2018)	**Colombia,** Public health care institution. Trans-sectional of descriptive and correlational nature. 112 employees	Analyze the relationship between the OC(understood through its artifacts) and compassion practices.	The OC through its artifacts predicts in a significant way the adoption of compassion organizational practices. In analyzing the type of culture that has the greatest predictive power over compassionate organizational practices, it has been found that progressive culture has the greatest effect, in contrast to traditional culture.
Zachariadou et al.,(2013)	**Cyprus,** 223 general practitioners (GPs) and nursing staff working at the 42 primary health care centers (PHC).	Assessing OC in the public health care setting.	Culture dimensions: "performance orientation" was the desired culture among health care professionals (mean: 1.39 ± 0.45). "Supportiveness" and "social responsibility" were the main cultures encountered in PHC (means: 2.37 ± 0.80, 2.38 ± 0.83).

Table 1. An overview of studies' characteristics and main findings (cont.)

Saillour-Glénisson et al.,(2016)	**France,** A database of OC items and themes was created after extensive literature review	Facing the lack of an appropriate tool, a multidisciplinary team designed and validated a dimensional OC questionnaire for health care settings to be administered at ward level.	The overall response rate was 80 %; the completion average was 97 %. The metrological results were: a global Cronbach's alpha coefficient of 0.93, higher than 0.70 for 12 sub-dimensions.
Montgomery et al.,(2010)	**Greece,** Reviewing the existing literature on organizational culture, burnout and quality of care in the health care sector.	To examine the physician burnout and to identify the focal point at which a deficient hospital culture and inadequate organizational resources are most evident.	Recommendations are provided with regard to how future research can approach quality of care from a bottom-up organizational change perspective. In addition, the need to widen the debate beyond US and North European experiences.
Khalghani et al., (2012)	**Iran,** 135 people (researchers and support staff) from five medical and health care research centers of Tehran.	Investigating organizational structure, culture, and information technology (IT) as knowledge management (KM) infrastructural capabilities, and compares their significance and status quo.	The Friedman test indicated that in terms of their status quo, the three studied KM enablers are at different conditions, with OC having the best (mean rank=1.79) and IT the worst (mean rank=2.14) status. It was revealed by regression analysis that although organizational culture is supportive of knowledge management initiatives, there is call for perfection of organizational structure, since regression analysis revealed its significant impact on KM.
Carney M., (2011)	**Ireland,** Interviews 50 professional clinician and non-clinician managers in acute care hospitals.	To identify if aspects of OC may indicate a new terrain in the cultural influences-quality health care relationship.	OC is more complex than was previously thought. Several cultural influences such as excellence in care delivery, ethical values, involvement, professionalism, value-for-money, cost of care, commitment to quality and strategic thinking were found to be key cultural determinants in quality care delivery.
R. Fedorowsky et al., (2015)	**Israel,** Cross-sectional descriptive design. Self-administered questionnaires. 420 health care workers from 1 acute care hospital and 1 postacute care facility.	To assess the association between OC and health care workers' attitudes, knowledge, practices, and Carbapenem-resistant Enterobacteriaceae (CRE) acquisition rate. To identify differences between different care settings and health care workers' sectors.	The OC was positively correlated with infection prevention attitudes and compliance with contact precaution protocols and negatively correlated with CRE acquisition rate. In the 2 care settings, health care workers' attitudes, knowledge, and practices were found to be similar. Compliance with contact precaution protocols by physicians was lower than compliance reported by other health care workers.

Table 1. An overview of studies' characteristics and main findings (cont.)

De Bono et al., (2014)	**Netherlands,** Previous literature is reviewed and synthesized, using both Infection prevention and control (IPC) journals as well as publications focusing on human behaviour and organizational change.	To examine the inter-relationship between OC and behavioural attitudes by health care professionals. To determine whether and how OC may impact on IPC compliance; and to highlight the potential for OC modification interventions to improve IPC practices within hospitals.	Evaluates the theory of OC within health care settings and identifies how various elements appear to impact on IPC-related behaviour. It highlights the paucity of well-designed studies but identifies sporadic literature suggesting that well-designed and customized OC change initiatives can have a positive impact on IPC practices, such as hand hygiene.
Jafree et al., (2016)	**Pakistan,** 309 nurses. Descriptive statistics, mean scores and multivariable logistic regression were used.	To investigate the association between OC and the culture of error reporting.	Three areas were ranked unfavorably by nurse respondents, including: the error reporting culture. All six categories of organizational culture, including: nurse manager ability, leadership and support, nurse participation in hospital affairs and others were positively associated with higher odds of error reporting culture.
Radwan et al., (2017)	**Pal**e**stine,** A cross-sectional Palestinian family doctors and nurses (n=323) who work within 71 Primary Health care Centers (PHC).	Identifying the predominant culture within the Palestinian PHC settings and testing its role in the adherence to Clinical Practice Guideline (CPG) for Diabetes mellitus.	The overall adherence level to the diabetic guideline was disappointingly suboptimal. In the PHC Ministry of Health (MoH), the clan/group culture was the most predominant (mean =41.13), followed by hierarchical (mean =33.14), while in the PHC-United Nations Relief and Works Agency for Palestine Refugees (UNRWA), hierarchical was the prevailing culture (mean =48.43), followed by clan/group (mean =29.73). A positively significant association between the adherence to CPG and the rational culture and a negatively significant association with the developmental archetype were detected in the PHC-MoH.

Table 1. An overview of studies' characteristics and main findings (cont.)

Cleary et al., (2013)	**South Africa,** A descriptive literature review	Examines the factors that influence the functioning of accountability mechanisms. To understand the practices that might strengthen accountability in ways that improve responsiveness of the health system to citizens' needs and rights, and of providers to patients.	Highlights the ways in which bureaucratic accountability mechanisms often constrain the functioning of external accountability mechanisms. Organizational cultures characterized by supervision and management systems focused on compliance to centrally defined outputs and targets can constrain front line managers and providers from responding to patient and population priorities.
Eric D. Carlstro¨m and Inger Ekman (2012)	**Sweden,** Two Surveys were used. Organisational Values Questionnaire (OVQ) and the Resistance to Change Scale (RTC). 117 nurses	To explore the connection between organizational cultures and the employee's resistance to change at five hospital wards in Western Sweden.	Indicate that a culture with a dominating focus on social competence decreases "routine seeking behaviour", i.e. tendencies to uphold stable routines and a reluctance to give up old habits. Indicate that a culture of flexibility, cohesion and trust negatively covariate with the overall need for a stable and well-defined framework.
T.S.J. Alharbi et al. (2012)	**Sweden,** 220 hospitalized patients and 117 nurses Uncertainty cardiovascular population scale (UCPS) and organizational values questionnaire (OVQ	Identify the impact of OC on patient uncertainty in five hospital wards during the implementation of person centered care.	Indicate that in hospitals where the culture promotes stability, control and goal setting, patient uncertainty is reduced. A culture of stability can better sustain a desired outcome of reform or implementation of new care models such as person centered care. Health managers have to be aware of what characterizes their OC before attempting to implement any sort of new health care model.
Acar and Acar, (2012)	**Turkey,** Multi-item scales adopted from prior studies. The scales are formed by literature review from recent and generally accepted sources. 332 employees 65 hospitals.	To reveal the relationships among innovativeness, OC and business performance.	The dominant OC in the Turkish health care industry is Hierarchy (mean= 3,5205), and it is followed by Clan (mean= 3,0658). Service, process and behavioral innovativeness sub-dimensions have positive effect on quantitative performance. Adhocracy, clan and market types of OC have positive effects on both quantitative and qualitative performance.

Table 1. An overview of studies' characteristics and main findings (cont.)

Bradley et al., (2017)	**USA,** Cross-sectional validation study. 147 individuals 10 hospitals	To develop and assess the validity and reliability of a scale for assessing OC in the context of hospitals' efforts to reducing 30-day risk-standardized mortality after acute myocardial infarction.	Resulting OC scale demonstrated high level of construct validity and internal consistency. Factor analyses indicated that the 31 items loaded well, supporting distinguishable domains. Cronbach α coefficients were 0.94 for the scale and ranged from 0.77 to 0.88 for the subscales. The scale displayed reasonable convergent validity and statistically significant variability across hospitals.
Sow et al., (2017)	**USA,** Quantitative method with a correlational design. 111 U.S. health care professionals	To measure the relationships between leadership style, organizational culture, and job satisfaction.	The research questions were answered by regressing transformational leadership, employee gender, employee race, and employee age on the dependent variable of job satisfaction. The regression for the three variables was significant.
Sinkowitz-Cochran et al. (2012)	**USA,** Evaluation of a mixed qualitative and quantitative methodology 6 hospitals 135 participants 20 focus groups	How hospital organizational and cultural factors associated with implementation of quality initiatives.	Significant differences between staff levels on the OC items, with executive-level staff having higher scores than midlevel and frontline staff. All 20 focus groups perceived that the campaign interventions were sustainable and that data feedback, buy-in, hardwiring (into daily activities), and leadership support were essential to sustainability.
Lam and Robertson, (2017)	**USA,** Designed survey. 226 surveys.	Investigate the impact OC and employee experiences and demographics have on the likelihood that employees will participate in continuous improvement projects.	Indicate that participants with prior experience (at least one project) are more likely to participate in continuous improvement projects. A statistically significant positive correlation between those participants who ranked tenure as being important to the decisions they make in their organization and how long they have been involved with continuous improvement projects.
Rider et al., (2018)	**USA**, Faculty from eight US medical schools Two open-ended questions (institutional-level motivators and impediments to humanistic practice and teaching). 68 of the 92 (74%) participants	To identify organizational factors that promote or inhibit humanistic practice of medicine by faculty physicians.	Motivators included an OC that enhances humanism, which we judged to be the overarching theme. Related themes included leadership supportive of humanistic practice, responsibility to role model humanism and others. Impediments included top down OC that inhibits humanism, along with related themes of non-supportive leadership, time and bureaucratic pressures.

Overview of the Included Studies

Among 21 included studies, five were conducted in the USA, two in Sweden, one in Turkey and many diverse countries. Among the relevant studies, 17 were research articles; 12 were quantitative studies, 2 were qualitative, one mixed method study and 2 were OC measurement tools design articles. Four were a secondary analysis of data; systematic review, peer-review, literature review and conceptual article.

Diverse care settings were represented in the studies. Identified settings included: hospitals (n = 11), different health care settings (n= 5), primary health care centers (n = 3), and medical educational and research Institutions (n = 2). In addition, study samples consisted exclusively of combination of Health care workers (n = 10), or of nurses (n = 3), managers (n=3) and only one study of doctors. Quality care, practical practices (errors reporting, infection control, adherence to the diabetic clinical practice and patient uncertainty), performance, Leadership style, and job satisfaction, change, human resources, technology and OC measurements' tools were the main outcomes of interest.

DISCUSSION

Excellence in health care delivery is linked to positive value systems delivered through a multidisciplinary team approach and the use of strategic involvement, the most important cultural organizational influences for optimum efficiency in the delivery of quality care. The cultural aspects identified are well-known subjects in the provision of care as independent concepts. When these aspects are collectively identified within an organization, it appears that they can influence the quality of care provided. Organizational theorists stressed the importance of knowing the culture in an organization in order to achieve success in the targeted objectives in different health care environments. In addition, different subcultures can subsequently emerge in multifaceted organizational structures, such as hospitals and health care institutions, more than one professional occupational category coexists (Martin and Siehl, 1983). These can share common orientation and values. However, there may also be disparate subcultures that either clash with each other openly or maintain an uncomfortable coexistence (Bate, 2010).Since OC is considered essential for achieving high performance in hospitals and other health care environments, the ability to empirically measure this nuanced concept has become increasingly important.

Organizational culture determines how people act, what people pay attention to and how they respond to different situations and how they communicate with new members and exclude those who do not fit (Spataro, 2005). The compliance of health workers with guidelines on the prevention of infection in health care settings can be influenced by the organizational culture of the institution. The association between high OC and higher reporting compliance with hand hygiene and epidemiological barrier precautions (Sinkowitz-Cochran et al. 2012). In an evaluation of OC and organizational performance studies, it was found that OC is directly related to an organization's performance (e.g. Denison, 1990). Based on literature review evaluations, employees have accepted innovation approaches as fundamental values and standards and it is also suggested that if innovation approaches have spread within the organization as a culture, this will affect performance (Acar, and Acar, 2012). There has been an increased interest in the possibility of accountability mechanisms to improve the performance of health systems in recent years. The design of accountability mechanisms also should pay attention to the organizational culture and different mechanisms for different contexts should be necessary. The literature review identified one of three factors that influence the functioning is the values, standards, institutions and health care culture. Moreover, A research study by Gold et al. (2001), revealed that an information-sharing culture was critical for effective knowledge management. Organization culture, which encourages open and transparent communication among the employees of the organization would lead to increased collaboration and knowledge sharing at hierarchical levels of the organization, which leads to knowledge sharing, increased communication with the aid of standard processes, and technology infrastructure make it easy and enhance collaboration (Vittal and Shivraj, 2010).

Nonetheless, cultural variables are also involved in organizational development and the creation of new behaviors. They have been shown strategically important during change process. Health care organizations should attempt to move away from externally focused cultures in order to create an internally focused culture increase job satisfaction. Such a move could improve social outcomes by improving the quality of work for millions of stressed health care (Sow, 2017). The future use of this OC assessment in health care studies that seek to understand health care systems deeply and its influence on clinical performance, will play an essential role in achieving their planned targets.

CONCLUSION

A wide range of publications were synthesized with various variables that attempted to study, measure, or interfere with the OC in healthcare settings. Research carried out in a variety across multiple healthcare organizations, mostly hospitals. The study may serve as background knowledge for leaders seeking to implement interventions to improve their performance before a new strategy is applied. Indeed, healthcare organizations need to be aware of their current capabilities to assess the level of necessary resources. The use of quality improvement programs in healthcare organizations also depends on culture being able to be implemented.

OC plays a key role in improving results and practical healthcare processes. The impact on health-related results varies according to the type of dominated organizational culture, while the deficiencies in healthcare can be increased or limited. Managers who are conscious of their organizational culture can use tools such as those used in mentioned studies to investigate and plan processes of change. Healthcare organizations need to provide technical and professional expertise to develop the appropriate, healthy OC or to change what can be achieved. In accordance with the road map, the results of the current review, which illuminate healthcare at the strategic level, begin to evaluate the OC in organizations to the extent to which it can affect daily health and clinical practice. Without positive organizational changes, it is unlikely that actions focused on individuals will achieve the desired improvements.

OC studies can be used as an audit tool for managers and policymakers to translate the key messages into healthcare implementation practices. Future studies should identify suitable solutions to the culture effect on clinical performance and efforts to improve outcomes. Randomized controlled trials are needed and procedure studies must be conducted with strong designs. Responsibilities aimed at building an organizational culture that is favorable to change as well as appropriate managerial, management and control systems and processes must be considered. The main message that emerges from the current study is for health leaders to make special efforts to create an internal healthcare organizations culture. In conclusion, give initial insights on the differences among different personnel in the health care system and emphasize the importance of harmonizing improvement efforts with OC in order to triumph the value of their efforts.

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