

Access this article online
Quick Response Code:

Website: www.jehp.net
DOI: 10.4103/jehp.jehp_1307_21

The organizational health components for small-sized health-care organizations: A systematic review

Shirin Alsadat Hadian, Mohammad Hossein Yarmohammadian¹,
Nasrin Shaarbafchizadeh¹

Abstract:

BACKGROUND: Organizational health (OH) is an organizational aspect in which staff is encouraged to be clearly involved and participate in decision-making, problem solving, and collaborating to improve organizational climate and culture. Multilevel staff involvement facilitates strengthened relationships, open communication, trust, and organizational commitment. The purpose of this study was to find components of OH for small-sized health-care organizations.

METHODS: A systematic review across three key databases by using an extensive list of keywords components and interventions was conducted. This survey included studies that explored various OH elements, components and interventions.

RESULTS: It comprises 34 full-text studies from 221 received studies. Afterward, the OH elements were classified into three main categories (OH elements, organizational health literacy, and organizational health interventions). Then, according to the reviewed data, 23 dimensions were defined similarly for all groups of studies and relevant explanations related to them were reported.

CONCLUSION: The OH encompasses multiple dimensions. Empirical research is required for designing a questionnaire according to the final extracted components and measuring its validation in small-sized health organizations.

Keywords:

Component, Health care, Organizational Health

Introduction

Health-care organizations (HCOs) are considered large and complex contemporary organizations, owing to their advanced procedures and different resources.^[1] Therefore, there have been increasing health problems among professionals such as turnover and burnout, sickness absenteeism as well as sickness leave, negative stress, exhaustion and depression, high workload, time pressure, and difficult work situations, work-related musculoskeletal injury, moral distress, anxiety, and even mortality. Health problems among health professionals

may be regarded as paradoxical, but they have become a reality in many health organizations.^[2] The level of health in an organization is related to its ability to achieve its goals and objectives^[3] and the vital role of leadership.^[4] Since human resources are the most important factors for efficiency and effectiveness, organizations cannot succeed without their efforts and commitment.^[5] In today's fast-paced, complex world, it seems indispensable for the manager of the organization to make an intimate and supportive relationship with staff, which in turn encourages them to commit to work and organization, perform their duties effectively, leaving work decreases and loyalty to the organization increases.^[6] Also, it seems important for

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

For reprints contact: WKHLRPMedknow_reprints@wolterskluwer.com

How to cite this article: Hadian SA, Yarmohammadian MH, Shaarbafchizadeh N. The organizational health components for small-sized health-care organizations: A systematic review. *J Edu Health Promot* 2023;12:37.

Student Research
Committee, School of
Management and Medical
Information Sciences,
Isfahan University of
Medical Sciences, Isfahan,
Iran, ¹Health Management
and Economics Research
Center, School of
Management and Medical
Information Sciences,
Isfahan University of
Medical Sciences, Isfahan,
Iran

Address for correspondence:

Mohammad Hossein
Yarmohammadian,
Health Management and
Economics Research
Center, Isfahan University
of Medical Sciences,
School of Management
and Medical Information,
Hezar Jerib St., Postal
Code: 81746-73461,
Isfahan, Iran.
E-mail: mhyarm@yahoo.
com

Received: 04-09-2021
Accepted: 29-12-2021
Published: 31-01-2023

the employers to simultaneously focus on employee's well-being and the organization's performance in terms of financial, social, and environmental responsibilities.^[7]

Organizational health (OH) is a more recent conceptualization that encompasses a multitude of parameters^[8] that aim to produce concrete output interventions^[9] to ensure that the employees have a favorable organizational commitment and resilience that is created through the employees' genuine desires and adoption of the organization's targets.^[10,11] As we spent a major part of our lives working in different organizations or interacting with them, the general opinion among the theorists is that there must be a balance between the negative and positive aspects of an organization and that we must endeavor to move toward positive organizational behavior. Human resources are one of the most important parts of every organization.^[12]

Health systems, as one of the main criteria for the level of growth and social welfare,^[13] play an important role in promoting various social, cultural, and economic indicators of countries.^[14] Today, organizations in the field of community health are determined that with a fundamental review of health management practices, they can work more than ever to implement the most effective methods in ensuring the health of individuals in the community.^[15] Surveys show that there are currently more than 25,000 health centers in Iran, of which more than 90% are considered small health centers.^[16,17] Given that the main goal of HCOs is to take care of patient's health and indirectly the health of employees, there is a strong relationship between effectiveness and OH.^[18]

In the last decade, various researchers have designed a framework for OH.^[7] Despite the presence of the complex challenges in managing HCOs,^[1] not enough studies have been done in the field of OH criteria in small-sized HCOs. Also, some studies have examined the relationship between OH components and other important components in the organization such as organizational culture, employee satisfaction level, and knowledge management, while most of these studies are outside the field of health and treatment (including in educational settings and business areas).^[5,19-23] In addition, some other articles that have examined the components of OH in the field of health have used only one or all of the components of OH approved in previous studies,^[24,25] while the present article seeks to identify other proposed components effective in OH. Therefore, the purpose of this study is to investigate the components of measuring OH in small-sized HCOs.

Methods

A systematic review of literatures was conducted on the field of OH, using three main databases, i.e. PubMed,

Scopus, and Web of Science, over the period of 1989–2020. Initially, keywords (free text terms) were identified by the authors through a brainstorming process. The identified keywords were refined and validated by a team composed of two university academic members and two health-care managers. The search strategy was formulated using Boolean operators. The formula was searched in the field of title or title/abstract in online databases. The search line was: TITLE: ("organizational health" OR "OH") AND TITLE-ABS-KEY: (aspect * OR dimension * OR rank * OR component * OR scale OR measure * OR criter * OR indic * OR tool * OR checklist OR tactic * OR strategy) AND TITLE-ABS-KEY: (Business OR company OR organization*).

Afterward, the identified publications were screened and then analyzed based on the following inclusion criteria: (i) studies that explored OH dimensions; (ii) articles in English; (iii) and years of publication from 1989 to May 2020. We excluded studies that (i) articles without appropriate data (solely focused on strategies and recommendation and experiments) and (ii) without available abstracts or full text or references. Then, a Preferred Reporting Items for Systematic Reviews and Meta-Analysis 2020 for abstract checklist was used to improve transparency in reviews.^[26]

When all screening and extraction were completed, disagreements on relevance were discussed. After independent reading of the full texts, the content was analyzed and 34 of 221 articles that addressed the research criteria were selected and deeply reviewed. Then, all appropriate data were extracted from studies in 326 fields, then by reviewing data several times, those were classified in 264 separated dimensions. Finally, 23 dimensions in three categories were extracted and every subdimension-related criteria after reviewing several times were explained as a separate part in relation to the main categories.

Results

It was included 34 English full-texts of studies [Figure 1], with most studies (about 80%) published in the academic years 2015-2020, of which more than one third (12 studies, 35%) were on organizational health literacy and about one fifth (6 studies, 18%) on organizational health intervention and the rest covering other organizational health components.

As presented in Table 1, our findings were classified into three main categories of OH which were OH elements (with main focus on correlations between OH and other elements such as leadership qualities, knowledge management, and psychological hardiness), OHL, and OHIs. Then, according to the reviewed data,

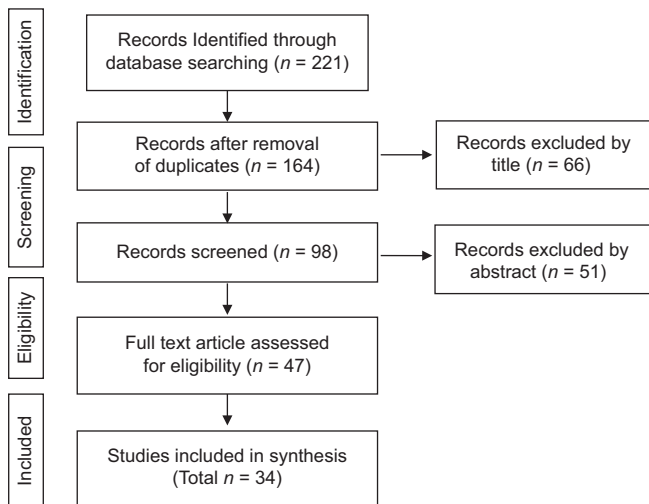


Figure 1: Study selection and data abstraction

23 dimensions were defined similarly for all groups of studies. For example, in the community engagement component, OH studies focused on multilevel participation,^[8] membership,^[22] involvement,^[27] staff affiliation,^[23] public perceptions,^[28] and trust in clients,^[29] while the same category for OHL explained community engagement and partnerships,^[30-33] involving patients,^[34] works in partnership with other organizations,^[32] undertaking community consultation and enabling consumer participation,^[35] and partnerships with other organizations,^[33] at the same time that of OHI were on social support,^[36] mental models of stakeholders,^[9] participation in intervention decision, stakeholder appraisals of intervention plans and activities,^[9] multilevel collaboration, social identity building, social comparison processes, interpersonal influences, and social learning,^[9] appointment of facilitator,^[9] and motivation of stakeholders.^[37]

Paying attention to the OH category in the majority of studies, 75% (12 of 16) expressed leadership as the first key dimension followed by motivation with 63%. Also, between 5 and 9 (about 30% to 60%) of studies focused on quality improvement, financial resources, policy, community engagement, equity, education, community engagement, culture and moral or ethics, and teamwork. There was no information about the evaluation dimension in OH studies.

Considering OHL category, 75% (9 of 12) of studies similarly reported communication, community engagement, human resource, and care system as the first dimension, followed by leadership and policy dimension with 67% (8 of 12). Information management, education, and quality improvement were discussed in about 55% of studies. There was not enough information for reporting four dimensions such as moral or ethics, satisfaction, knowledge management, and innovation in OHL studies.

Turning into the OHI category, after community engagement dimension with 67% (4 of 6), leadership, policy, quality improvement, and teamwork similarly with 50% stood at the second important criteria of OH. Besides, communication, motivation, human resource, equity, organizational structure, culture, environment assessment, technology, and knowledge management were reported with 33%. Also, reported information for two dimensions such as moral or ethics and innovation was zero.

Furthermore, as depicted in Table 1, the majority of studies (24 of 34, 71%) reported leadership scale as the key elements in OH, followed by community engagement and policy components by about 60% of studies. In addition, 11 dimensions were extracted from 10 to 17 studies, of which quality improvement and communication were discussed in 50% of studies, and motivation, human resources, and education dimensions were studied in between 41% and 44% of studies. Finally, another nine dimensions were discussed in 3–9 studies, of which innovation with the lowest rate was reported in just 3 of 34 studies.

Discussion

During the last few decades, there have been a number of reforms and organizational changes in the health systems,^[2] which is defined in terms of how a health organization is able to deal with and clarify the tensions of diverse and competing values. Here, we found 23 components of OH in three categories, while 17 investigators maintained that there are between 3 and 12 components.^[8,23,27-28,31-35,38-45]

Also, the number of OH dimensions varied from one study to another. For example, five dimensions of OH were discussed in three studies: Karami,^[40] G. Brega,^[45] and Mehta^[41] surveys, but that of Hashemi^[38] and Trezona^[33] studies was 7 dimensions.

Moreover, it was found that there was no actual similarity between various OH dimensions in most studies. For instance, four studies focused on six dimensions of OHL^[31-32,42,44] such as Anna Aaby and her colleagues which reported leadership and culture, systems, processes, and policies, access to services and programs, community engagement and partnerships, communication practices and standards, and workforce,^[31] but Farmanova's study attributes were access and navigation, communication, consumer involvement, workforce, leadership and management, and meeting needs of the population.^[44] Moreover, Trezona mentioned supportive leadership and culture, supportive systems, processes and policies, supporting access to services and programs, community engagement and partnerships, communication practices

Table 1: Proposed organizational health-care components for health organizations

Categories	Main dimensions		
	Leadership	Community engagement	Policy
OH dimensions	Collaboration, collaborative leadership (20), manager influence (6), decision-making, autonomy, focused leadership, communication leadership, trust leadership, respectful leadership, risk leadership, bottom-line leadership, empowered leadership, long-term leadership, organizational leadership, cultural leadership (43), target path leadership, cybernetic management (27), administrator influence (38), autonomy, optimal power (39), leadership (25), supportive leadership (23, 28), holistic leadership (40), principal support, principal influence (41), supervisor competence, supervisor support (28), principal influence (29)	Multilevel participation (8), participation (membership) (22), involvement, participatory decision-making, develop a sense of ownership (27), participatory management (25), staff affiliation (23), public perceptions (28), trust in clients (29)	Unity of purpose (20), insight (vision) (22), goal focus (39,43) goal/organizational clarity (25), independent organizational prioritization, having a clear prospect (40), different values, the need for both integration and disintegration of values in an organization (2), coping strategies (28)
	Health-care provider support (30), leadership (31, 33, 34), leadership and management (44), organizational leadership, leadership support for activities (45), supportive leadership, demonstrates leadership and commitment (32), leadership and commitment (33), leadership that makes health literacy integral to its mission, structure, and operation (35)	Active engagement (30), community engagement and partnerships (31-33), consumer involvement (44), staffing and structures to enhance patient and family engagement (45), involving patients (inclusion of the served) (34), involves patients in developing health information (47), fosters a person-centered philosophy, undertakes community consultation and enables consumer participation, works in partnership with other organizations (32), communication systems and processes, partnerships with other organizations (33), undertaking community consultation and enabling consumer participation, includes populations served in the design, implementation, and evaluation of health information and services (35)	Social support for health (30), systems, processes, and policies (31, 33), organizational policy (45), mission statement (34), makes health literacy an organizational priority, ensures written internal policies and procedures are in place (32), external policy and funding environment, organizational priority, internal policies and procedures (33), policy (42), establish management policy (48)
OH intervention dimensions	Attend to power differentials, programs and services to local contexts (49), line manager attitudes, active support from managers, building of coalition of leaders and drivers (9), leader's perceptions (50)	Promote meaningful community and patient engagement (49), social support (36), mental models of stakeholders, participation in intervention decision, stakeholder appraisals of intervention plans and activities, multilevel collaboration, social identity building, social comparison processes, interpersonal influences, and social learning (psychosocial mechanisms of change), appointment of facilitator, customer loyalty/satisfaction, and corporate social responsibility (9), motivation of stakeholders (37)	Professional development (20), continued intervention processes, context-specific interventions (8), problem solving (43), cognition of performance (27), problem solving adequacy (39), cohesiveness (39) effectiveness, safety, performance feedback, competence development, work intensity/tempo (25), independent organizational planning, recognizing organizational capabilities (40), professional development and preparation for work (28), a wellness program which is "reasonably designed" (has a reasonable chance of positively improving the health of population) (46) Actively managing health (30), develop action plan (44), track progress/sustain effort (44), undertakes service planning and quality improvement, provides ongoing professional development (32), providing ongoing professional development (33), planning, evaluation measures, patient safety, and quality improvement (35), improve the HL to be significant for others (health takes many forms) (48)
			Re-vision the use of time (49), control (36), observable and perceived exposure to intervention activities, implementation process; time-limited enactment of all steps and elements of the original intervention plan, thorough diagnosis, definition of goals/vision, raising of shared problem awareness, good time management, healthy organizational outcomes; organizational commitment, high performance (51)

Contd...

Table 1: Contd...

Categories	Main dimensions			
	Communication	Motivation	Human resources	Education
OH dimensions	<p>Accurate receipt and comprehension of a message, Evolution (as the methods of communication evolve) (8), communication (39,43), relationship (27), internal communication (25), independent organizational creative communications, effective relationships (40)</p>	<p>Trust (8), consideration, support (6), faith (hope), altruism (love) (22), loyalty and commitment, commitment (27), change motivation, mental energy/emotional exhaustion (25), burnout (23), trust and confidence ability, capability and self-awareness (40), psychological capital (resilience, optimism, hope, self-efficacy), intent to leave (28), reasonable alternatives to achieving financial incentives include physical, social, mental, and emotional health improvement opportunities. The size of the financial incentive motivates me but is not so large that I perceive it to be coercive (46) consideration (29)</p>	<p>Staff development (27), personal connectedness (23), growth of quality of independent occupational services (40)</p>	<p>Learning partnership (20), scientific emphasis (6), learning (43), ongoing training and development programs (27), scientific emphasis (38), excellence of specialized skills (40), positive learning environment (41), education about reasonable alternatives to earning the financial incentives (46)</p>
OH literacy dimensions	<p>Communication practices and standards (31), communication (44, 45), monitoring and improvement of standards (45), communication standards (translators, allowing pauses for reflection, calling for further queries) (34), presence of communication standards (47), ensures effective communication systems and processes are in place, communication practices and standards, applies communication principles and standards (32), access to services and programs, communication practices and standards, communication principles/standards (33), providing outreach services, interpersonal communications and confirms understanding at all points of contact communicates clearly what health plans cover and what individuals will have to pay for services (35), patient-provider interaction (42)</p>	<p>Structured methods for encouraging (45), providing supportive working environments (33), provide a supportive environment (navigation and access), making health attractive communication (48)</p>	<p>Workforce (31, 33, 34, 44), staffing and structures to enhance patient and family engagement (45), human resources planning (34), assists clients in determining costs (47), recruiting, supporting and developing the workforce, recruits an appropriate workforce (32), recruiting and appropriate workforce (33), prepares the workforce (35), qualified staff in communication, promoting staff health (48)</p>	<p>Communicate raise awareness (44), training for staff (45), training on HL for skilled staff (46), Provides health education programs (32), providing health education programs (33), patient education (47)</p>
OH intervention dimensions	<p>Lively communication (51), communication among stakeholders (37)</p>	<p>Fairness and reward (36), empowerment for self-optimization, quick-wins and motivation, effort-reward-imbalance (51)</p>	<p>Workload (36), recruitment, reach (e.g., number of workshop participants), healthy employees: efficacy</p>	<p>Dose delivered (e.g., number of workshops), dose received (e.g., engagement in workshops) (51)</p>
				<p>Resource utilization, (39, 43) application of resources (27), resource support (29, 38), efficiency, organizational efficacy (25), material resources (41), community resources (28), the financial incentive is clearly framed (as a positive opportunity and an act of support for health), is well informed by a diversity of opinions and views (46)</p>
				<p>Organizational resources, psychological resources, collective general resistance resources, job demands and resources and ratio of</p>

Contd...

Table 1: Contd...

Categories	Main dimensions				
	Communication	Motivation	Human resources	Education	Financial resources
OH dimensions	Power equalization (43), justice in pay (27), equalization (39) equity (25), justice and coherence (40), vicarious trauma, addressing disproportionality (28), the choices I am offered are sensitive to my age, gender, ethnicity, and other personal and demographic influences on lifestyle practices (46)	Institutional integration (6), construction (6, 38), flat structure (27), institutional integrity (29)	beliefs, trust, positive emotions, resilience, and work engagement (51)	Institutional unity, noteworthy (38), culture of trust and strong values such as respect (40), a tricultural approach to value tensions (2), shared vision, inclusivity, cultural competence (28), the culture of health in my organization is visibly aligned with the intent of the incentive (46), trust in principal (29)	resources and demands, demand-control-support, task resources, social resources, and healthy practices (51)
	Adapt an intervention into different languages (elucidating the perspectives of community members of culturally diverse groups) (53), promotes equity and diversity (32), equity and diversity focused (33), meets the needs of populations while avoiding stigmatization, addresses health literacy in high-risk situations, including care transitions and communications about medicines (35)	Navigating the health system (30), access and navigation (44), organizational structure (45), supportive systems, processes and policies (32), systems, processes and policies (33), establish organizational structures, contribute to HL in the region (establishing healthy regions) (48)	Access to services and programs (31), meeting needs of population (44), staffing and structures to enhance patient and family engagement, serving patients with limited english proficiency, using the teach-back method to ensure patient comprehension, medication review to improve accuracy and patient understanding, simplifying the process of scheduling appointment, ensuring referral completion, improving access to patient education, addressing patients' nonmedical needs, setting self-management goals, self-management support before, during, and after an inpatient stay, serving patients with limited english proficiency (45), high-risk and in critical situations (medication, surgical consent) (34), providing hospital tours (walking interview) increasing the confidence of community members (53), effort to help clients easily find their way (47), supports initial entry and ongoing access to services and programs, provides outreach services (32), consumer-centered philosophy (33), develop materials and services in participation with individual need (48)	Collegial support (20), teamwork (25), teacher collegiality (41) team cohesion, professional sharing and support (28), (39, 43) trust in colleagues (29)	Innovation Conscience (meaning-calling) (22), innovativeness (39, 43)
OH literacy dimensions	Adapt an intervention into different languages (elucidating the perspectives of community members of culturally diverse groups) (53), promotes equity and diversity (32), equity and diversity focused (33), meets the needs of populations while avoiding stigmatization, addresses health literacy in high-risk situations, including care transitions and communications about medicines (35)	Navigating the health system (30), access and navigation (44), organizational structure (45), supportive systems, processes and policies (32), systems, processes and policies (33), establish organizational structures, contribute to HL in the region (establishing healthy regions) (48)	Access to services and programs (31), meeting needs of population (44), staffing and structures to enhance patient and family engagement, serving patients with limited english proficiency, using the teach-back method to ensure patient comprehension, medication review to improve accuracy and patient understanding, simplifying the process of scheduling appointment, ensuring referral completion, improving access to patient education, addressing patients' nonmedical needs, setting self-management goals, self-management support before, during, and after an inpatient stay, serving patients with limited english proficiency (45), high-risk and in critical situations (medication, surgical consent) (34), providing hospital tours (walking interview) increasing the confidence of community members (53), effort to help clients easily find their way (47), supports initial entry and ongoing access to services and programs, provides outreach services (32), consumer-centered philosophy (33), develop materials and services in participation with individual need (48)	Inter-staff interaction (42), share experience and be a role model (together for health) (48)	-

Contd...

Table 1: Contd...

		Main dimensions						
Categories	Equity	Organizational structure	Care system	Culture	Innovation			
OH intervention dimensions	Explicitly commit to equity, actively counter racism and discrimination, tailor care to address inter-related forms of violence, enhance access to the social determinants of health (49), fairness and values (36)	Develop supportive organizational structure (49), task characteristics, social characteristics, and physical characteristics, process flexibility, minor structural and strategic modifications (e.g., adapted agendas, rules of communication, and well-being checks) (51)	Tailor care (49)	Values (36), awareness of norms, diversity, early role clarification, manager availability, and constructive conflicts (51)	Professional project organization and responsibilities, individual and collective sense of coherence, work-related sense of coherence, individual competencies and collective capacities for self-optimization in teams, shared meaning-making (51), team climate (51, 52), team's perceptions (50)			
		Main dimensions						
Categories	Information management	Environment assessment	Technology	Evaluation	Moral/Ethics	Satisfaction	Changes	Knowledge management
OH dimensions	Accuracy of the information (27)	Fame or prestige of the organization (27), work climate (25), physical environment (28)	Evolution (as technology advances) (8)		Morale (6, 27, 29, 38, 39), ethics (27), behaviorism (40)	Job satisfaction (20), job satisfaction of the employees (38), professional quality of life (compassion satisfaction, compassion fatigue), job satisfaction (pay, promotion, supervision, benefits, contingent rewards, operating procedures, coworkers, nature of work, communication) (28), contingent incentives, the choices I am given are aligned with my values, needs, and priorities (as measured by a perceived organizational support scale) (46)	Adaptation (39), readiness for change (28)	Knowledge creation, knowledge sharing, applying knowledge (6), memory (43)
OH literacy dimensions	Finding health information, understanding health information (30), direction signs, information staff, health literacy skills range (different languages, print sizes, braille), media variety (3-dimensional models, DVDs, picture stories) (34), uses individualized health information (47), provides	Provides an appropriate service environment, provides supportive working environments, practice tools and resources	Uses media and technology effectively, providing practice tools and resources, using media and technology (33), designs and distributes print,	Appraisal of health information (30), team set aims to assess, establish measures (44), quality management measures (47), undertakes performance			Test changes (44)	

Contd...

Table 1: Contd...

Categories	Main dimensions							
	Information management	Environment assessment	Technology	Evaluation	Moral/Ethics	Satisfaction	Changes	Knowledge management
OH intervention dimensions	clients information in different media (47), supporting access to services and programs, undertakes data collection and community needs identification, provides health information effectively (32), undertaking data collection and community needs identification, supporting the initial entry and ongoing access to services and programs, providing health information (33), provides easy access to health information and services and navigation assistance (35), print materials (educational print materials are available for patients) (42)	(32), providing an appropriate service environment (33)	audiovisual, and social media content that is easy to understand and act on (35), technology (42)	monitoring and evaluation (32), undertaking performance monitoring and evaluation (33), monitors progress (35)	-	Employee readiness and intervention history, fidelity of implementation as planned, and participants attitudes to and satisfaction with the intervention (51)	Discrete context relevant to the implementation and change process, readiness for/ stages of change, anchoring of change, changes in attitudes, values, and knowledge (51)	Knowledge gains (36), explication of tacit knowledge (51)

OH=Organizational health, HL=Health literacy

and standards, recruiting, supporting, and developing the workforce as the six OHL dimensions^[32] while according to Weave study, these components were patient-provider interaction, patient education, print materials, technology, inter-staff and interaction, and policy.^[42]

In addition, ten dimensions of OH were mentioned in four studies, for instance, in Dudek-Shriber's study was goal focus, communication, power equalization, decision-making, resource utilization, innovativeness, autonomy, learning, problem-solving, and memory,^[43] while that of Hasani investigation was relationship, involvement, loyalty and commitment, fame or prestige of the organization, morale, ethics, cognition of performance, target path leadership, staff development, and application of resources.^[27] Latrina's 10 dimensions were direction signs, information staff, leadership, integration, high-risk and in critical situations, communication standards, health literacy skills range, involving patients, media variety, workforce, and costs.^[34]

On the other hand, there were a significant direct relationship between OH with other elements in 10 studies such as knowledge management,^[6] spiritual leadership,^[22] leadership,^[43] cybernetic management,^[27] student achievement,^[39] nurses' and physicians' perceptions and quality of patient care,^[25] independency environment,^[40] teacher efficacy and positive learning environment,^[41] academic emphasis,^[29] and school culture and job satisfaction components.^[20]

This study has shown that a number of different components can be considered to examine OH in small-sized health-care organizations. Therefore, it was examined different elements of OH from three dimensions: OHIs, OHL, and other OH elements. The final identified and proposed OH elements for small-sized health-care organizations are leadership, policy, organizational structure, culture, changes, innovation, community engagement, communication, quality improvement, environment assessment, evaluation, motivation, financial resources, equity, satisfaction, human resource, moral/ethic, teamwork, care system, technology, information management, knowledge management, and education.

In this regards, each of the dimensions identified in the subset of a major title such as team work,^[25] and sub-title such as inter-staff interaction,^[41,46-47] share experience and be a role model^[48-50] team climate,^[51,52] and team's perceptions^[50] so on, or title such as equity and sub-title such as power equalization,^[43] justice in pay,^[27] influences of age, gender, ethnicity,^[46] adapt an intervention into different languages (culturally diverse groups),^[53] fairness and values^[36] and tailor care to address inter-related forms of violence,^[49] was reported.

Although this study is the first to identify 23 OH components to use in small-sized health-care organizations, due to time constraints, and limited access to experts, it was not possible to determine the validity of the components extracted by experts. Therefore, further research is needed to study the implementation of our final components by questionnaire designing and measuring its validity and reliability. This will cause a precise process to standardize or to develop and create a very good questionnaire for OH in small-sized health organizations and to obtain the desired outcomes. In addition, due to the high number of identified components, it is possible to define other categories (in the form of merging existing components or further separating them).

Conclusion

The organizational health encompasses multiple dimensions. This research tried to help the healthcare policymakers by identifying the components of OH, to help improve the health of the mentioned organizations while trying to improve the health of patients and clients of health organizations.

Also, for further studies empirical research is required for designing a questionnaire according to the final extracted components and measuring its validation in small-sized health organizations.

Acknowledgment

The authors would like to sincerely thank Dr. Mostafa Amini-Rarani, the assistant professor of the School of Management and Medical Information at MUI, Iran because he guided us in categorizing proposed OH components for small-sized health-care organizations.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

References

1. Ghiasipour M, Mosadeghrad AM, Arab M, Jaafari-pooyan E. Leadership challenges in health care organizations: The case of Iranian hospitals. *Med J Islam Repub Iran* 2017;31:96.
2. Orvik A, Axelsson R. Organizational health in health organizations: Towards a conceptualization. *Scand J Caring Sci* 2012;26:796-802.
3. Doğanay E, Dağlı A. Organizational health scale: A scale development study. *Int Educ Stud* 2020;13:128.
4. Anbari E, Yarmohammadian M, Alavi A. Modeling the ethical leadership and the organizational trust with the organizational learning in the work environment. *Int J Educ Psychol Res* 2016;2:260.
5. Mohammad Mosadegh Rad A, Hossein Yarmohammadian M. A study of relationship between managers' leadership style and

- employees' job satisfaction. *Leadersh Heal Serv* 2006;19:11-28.
6. Aryankhesal A, Hasani M, Niknam N, Safari M, Ranaei A, Kalteh EA. Staff perspectives on the relationship between knowledge management and social capital with organizational health in selected educational hospitals in Tehran. *J Educ Health Promot* 2020;9:29.
 7. Singh A, Jha S. Scale development of organizational health construct. *Glob Bus Rev* 2018;19:357-75.
 8. Brittain AC, Carrington JM. A concept analysis of organizational health and communication. *Nurs Adm Q* 2019;43:68-75.
 9. Fridrich A, Bauer GF, Jenny GJ. Development of a Generic Workshop Appraisal Scale (WASC) for organizational health interventions and evaluation. *Front Psychol* 2020;11:2115.
 10. Yüceler A, Doğanalp B, Kaya ŞD. The relation between organizational health and organizational commitment. *Mediterr J Soc Sci* 2013;4:781-8.
 11. Norouzinia R, Ebadi A, Ferdosi M, Masoumi G, Tayebi Z, Yarmohammadian MH. A systematic review of psychometric properties of workplace resilience measurement scales. *Tpm Test* 2020;27:251-69.
 12. Papi A, Mosharraf Z, Farashbandi FZ, Samouei R, Hassanzadeh A. The effect of bibliotherapy on the psychological capital of the staff of the School of Management and Medical Informatics of Isfahan University of Medical Science. *J Educ Health Promot* 2017;6:31.
 13. Barati B, Farzianpour F, Arab M, Rahimi Foroushani A. Evaluation of the performance of hospitals in Torbat Heydarieh city based on the pabon lasso model and its relative comparison with national standards. *Torbat Heydariyeh Univ Med Sci* 2017;5:48-55.
 14. Karami Matin B, Rezaei S, Sufi M, Kazemi Kariani A. Evaluation of Kermanshah University of medical sciences teaching hospitals using Pabon Lasso Model (2006-2011). *Kermanshah Univ Med Sci* 1393;18:53-61.
 15. Iravani Tabrizipour AP, Fazli S, Alvandi M. Applying A Fuzzy AHP and BSC approach for evaluating the performance of Hasheminejad kidney Center, Iran. *Heal Inf Manag* 2012;9:327-38.
 16. Shafizadeh H, Moradi Rokabdar Kalaei S. Investigating the Relationship between Organizational Health and Organizational Behavior of University Managers; 2017. Available from: <https://www.amar.org.ir/news/ID/5564>. [Last accessed on 2022 May 18].
 17. Alireza R. Activities of 24,000 Health Units across the Country; 2017. Available from: <https://www.isna.ir/news/97052613529/>. [Last accessed on 2022 May 18].
 18. Bakhtazma N, Vafae-Najar A, Shargh BB. Designing an organizational health model for Iranian Hospitals. *Navid No* 2020;23:13-28.
 19. Bahadori M, Yaghoubi M, Javadi M, Rahimi ZA. Study of relationship between the organizational structure and market orientation from the viewpoint of nurse managers. *J Educ Health Promot* 2015;4:15.
 20. Abdullah AG, Arokiasamy AR. The influence of school culture and organizational health of secondary school teachers in Malaysia. *Tem J Technol Educ Manag Inform* 2016;5:56-9.
 21. Aryankhesal A, Hasani M, Niknam N, Safari M, Ranaei A, Kalteh EA. Staff perspectives on the relationship between knowledge management and social capital with organizational health in selected educational hospitals in Tehran. *J Educ Health Promot*. 2020 Feb 28;9:29.
 22. Behroozi M, Qasemi L, Khodadadi S, Behroozid S. A survey of the relationship between the spiritual leadership and the organizational health in Bushehr's school province. *Irans Aspect* 2017;3:179-85.
 23. Bottiani JH, Bradshaw CP, Mendelson T. Promoting an equitable and supportive school climate in high schools: The role of school organizational health and staff burnout. *J Sch Psychol* 2014;52:567-82.
 24. Goodarzi B, Shakeri K, Ghaniyoun A, Heidari M. Assessment correlation of the organizational agility of human resources with the performance staff of Tehran Emergency Center. *J Educ Health Promot* 2018;7:142.
 25. Hussein AH. Relationship between nurses' and physicians' perceptions of organizational health and quality of patient care. *East Mediterr Health J* 2014;20:634-42.
 26. Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *BMJ* 2021;372:n71.
 27. Hasani K, Sheikhesmaeili S, Aeini T. The survey of cybernetic management and its relation to organizational health. *Syst Pract Action Res* 2015;28:229-54.
 28. Potter CC, Leake R, Longworth-Reed L, Altschul I, Rienks S. Children and youth services review measuring organizational health in child welfare agencies. *Child Youth Serv Rev* 2016;61:31-9.
 29. Zahed-Babelan A, Moenikia M. A study of simple and multiple relations between organizational health and faculty trust in female high schools. *Innov Creat Educ* 2010;2:1532-6.
 30. Aaby A, Simonsen CB, Ryom K, Maingal HT. Improving organizational health literacy responsiveness in cardiac rehabilitation using a co-design methodology: Results from the heart skills study. *Int J Environ Res Public Health* 2020;17:1015.
 31. Aaby A, Palner S, Maingal HT. Fit for diversity: A staff-driven organizational development process based on the organizational health literacy responsiveness framework. *Health Lit Res Pract* 2020;4:e79-83.
 32. Trezona A, Dodson S, Fitzsimon E, LaMontagne AD, Osborne RH. Field-testing and refinement of the organisational health literacy responsiveness self-assessment (Org-HLR) tool and process. *Int J Environ Res Public Health* 2020;17:1000.
 33. Trezona A, Dodson S, Osborne RH. Development of the Organisational Health Literacy Responsiveness (Org-HLR) self-assessment tool and process. *BMC Health Serv Res* 2018;18:694.
 34. Prince LY, Schmidtke C, Beck JK, Hadden KB. An assessment of organizational health literacy practices at an academic health center. *Qual Manag Health Care* 2018;27:93-7.
 35. Vamos CA, Thompson EL, Griner SB, Liggett LG, Daley EM. Applying organizational health literacy to maternal and child health. *Matern Child Health J* 2019;23:597-602.
 36. Buruck G, Tomaschek A, Luetke-Lanfer SS. Burnout prevention team-process evaluation of an organizational health intervention. *J Public Heal* 2019;27:743-54.
 37. Jalali MS, Rahmandad H, Bullock SL, Ammerman A. Dynamics of implementation and maintenance of organizational health interventions. *Int J Environ Res Public Health* 2017;14:917.
 38. Terry PE. On voluntariness in wellness: Considering organizational health contingencies. *Am J Health Promot* 2019;33:9-12.
 39. Dudek-Shriber L. Leadership qualities of occupational therapy department program directors and the organizational health of their departments. *Am J Occup Ther* 1997;51:369-77.
 40. Hashemi SA, Mirjafari SA. The role of organizational health and psychological hardness in predicting job satisfaction among employees of special economic zone of Shiraz. *Indo Am J Pharm Sci* 2017;4:2497-501.
 41. Hernandez R, Zamora R. The relationship between organizational health and student achievement in high poverty schools. *Int J Learn Teach Educ Res* 2018;17:56-76.
 42. Karami A, Salimian M. Organizational independence pattern of central bank of the Islamic Republic of Iran based on organizational health. *Postmod Openings* 2018;9:86-100.
 43. Rathmann K, Vockert T, Wetzel LD, Lutz J, Dadaczynski K. Organizational health literacy in facilities for people with disabilities: First results of an explorative qualitative and quantitative study. *Int J Environ Res Public Health* 2020;17:2886.
 44. Farmanova E, Bonneville L, Bouchard L. Organizational health literacy: Review of theories, frameworks, guides, and

- implementation issues. *Inquiry* 2018;55:1-17.
45. Brega AG, Hamer MK, Albright K, Brach C, Saliba D, Abbey D, *et al.* Organizational health literacy: Quality improvement measures with expert consensus. *Health Lit Res Pract* 2019;3:e127-46.
 46. Weaver NL, Wray RJ, Zellin S, Gautam K, Jupka K. Advancing organizational health literacy in health care organizations serving high-needs populations: A case study. *J Health Commun* 2012;17 Suppl 3:55-66.
 47. Mehta TG, Atkins MS, Frazier SL. The organizational health of urban elementary schools: School health and teacher functioning. *School Ment Health* 2013;5:144-54.
 48. Wiczorek CC, Ganahl K, Dietscher C. Improving organizational health literacy in extracurricular youth work settings. *Health Lit Res Pract* 2017;1:e233-8.
 49. Browne AJ, Varcoe C, Ford-Gilboe M, Nadine Wathen C, Smye V, Jackson BE, *et al.* Disruption as opportunity: Impacts of an organizational health equity intervention in primary care clinics. *Int J Equity Health* 2018;17:154.
 50. Hasson H, von Thiele Schwarz U, Nielsen K, Tafvelin S. Are we all in the same boat? The role of perceptual distance in organizational health interventions. *Stress Health* 2016;32:294-303.
 51. Fridrich A, Jenny GJ, Bauer GF. The context, process, and outcome evaluation model for organisational health interventions. *Biomed Res Int* 2015;2015:414832.
 52. Lehmann AI, Brauchli R, Bauer GF. Goal pursuit in organizational health interventions: The Role of team climate, outcome expectancy, and implementation intentions. *Front Psychol* 2019;10:154.
 53. Lloyd J, Dougherty L, Dennis S, Attenbrow H, Harris E, Wise M, *et al.* Culturally diverse patient experiences and walking interviews: A co-design approach to improving organizational health literacy. *Health Lit Res Pract* 2019;3:e238-42.