



PERCEPTION OF QUALITY OF CARE CULTURE AMONG HEALTH CARE PROVIDERS IN NAJRAN GENERAL HOSPITAL

Maihat Hamad Al Hadaisan^{1*}, Saleh hussien M Alhulays², Turki Hamad Saleh Al Zalaig³, Abdullah saleh omar Alhassan⁴, Ali Saleh Ali AlAlhareth⁵, Salem Saleh Hasan Al Yami⁶, Hassan mohmed Ali Al khaywany⁷, Hussein Mohammed Hussein Al Zulaiq⁸

^{1*}Healthcare administration, Department of patient experience, Najran New General Hospital
Najran Saudi Arabia

²Health services & hospital management. Management of centers, Najran General Hospital

³Pharmacy Technician, New Najran General Hospital - Puplic Health - Centers Affairs

⁴Pharmacy technician, Workplace: New Najran General Hospital

⁵Health services & hospital management . Workplace: New Najran General Hospital

⁶X Ray technician, Primary health care center in Al-Mashaalia

⁷Laboratory technician, King khalid Hospital

⁸Nurse, New Najran General Hospital Academic Affairs and Training Department

***Corresponding Author:** Maihat Hamad Al Hadaisan

^{*}Healthcare administration, Department of patient experience, Najran New General Hospital
Najran Saudi Arabia

Abstract

This study aimed to assess and evaluate the perceptions of healthcare practitioners regarding the different aspects of the quality of care in Najran General Hospital and examine how that influence their response to quality roles. A cross- sectional study was conducted using the Total Quality Tasks (TQT) questionnaire, which was completed by 76 healthcare practitioners. The TQT measures three dimensions of total quality management (TQM): Quality Practice (QP), Quality Faith (QF), and Quality Knowledge (QK). The results showed that the overall mean scores for QP, QF, and QK were 6.5, 6.2, and 2.3, respectively, indicating a medium level of TQM among the healthcare practitioners. There were significant differences in the mean scores of QP, QF, and QK based on gender and job title. No significant differences were found based on age, nationality, and experience. These findings suggest the need for interventions to improve TQM among healthcare practitioners, particularly for males and those in administrative positions. Future research should consider the inclusion of a larger sample size and multiple hospitals to further examine the influence of various factors on TQM among healthcare practitioners.

Keywords: Quality of care, healthcare practitioners, perceptions, quality roles, Saudi Arabia.

BACKGROUND

Quality of care has been a developing concept ever since its first appearance. Despite the variation in literature, the WHO holds the definition of Quality of care as “the extent to which health care services provided to individuals and patient populations improve desired health outcomes. In order to achieve this, healthcare must be safe, effective, timely, efficient, equitable, and people-centered”. The variation in definition happens to also occur regionally, In a study conducted in 2013 to assess

the agreement and disagreement on Health Care Quality Concepts Among Academic Health Professionals within Saudi Arabia, it appears that there's quite a variation in definition even within superficially similar groups [1].

The current status of quality of care in Saudi Arabia varies regionally and there is not enough data to precisely describe it around the kingdom [4], however, in several studies, it has been established that there is still a great need for improvement and barriers to break [3]. According to a systematic review published in 2014, the barriers to high-quality healthcare can be classified into patient factors and provider's factors. The patients include health literacy, access to care, and culture.

And the provider's include medical care, workload, culture, and job satisfaction [5]. As evident, there are many key role players to achieve a better quality of care; a major one of which is healthcare providers [2], and hence assessment of their current knowledge is vital to the delivery of high-quality service.

A systematic review was conducted in 2005 to assess the current status of the quality of primary health care provided in Saudi Arabia. The quality was evaluated in terms of both access and effectiveness of provided care; either clinical or interpersonal.

Good access and effective care were found in certain services including immunization, maternal health care, and control of epidemic diseases. On the other hand, poor access and effectiveness were found in chronic disease management programs, prescribing patterns, health education, referral patterns, and some aspects of interpersonal care including those caused by language barriers.

Also, it was found that multiple factors played a vital role in the delivery of high-quality care. These included factors related to management and organization, evidence-based practice, professional development, use of referrals to secondary care, and organizational culture [6].

In another systematic review conducted to assess the quality of healthcare provided in Saudi Arabia, it becomes evident that the quality of healthcare in Saudi Arabia has evolved over years, yet there are many challenges facing the achievement of high-quality care; of which we count the rapid increase in the number of the population associated with an increase of both needs and demands of the population.

According to the study, Factors affecting the quality of healthcare can be classified into patient factors including health literacy, access to care, and culture, and providers' factors like medical care, workload, culture, and job satisfaction [5].

A third systematic review discussing the quality of care in university hospitals in Saudi Arabia reveals a need to improve the quality of healthcare delivery, specifically in areas of patient safety, clinical effectiveness, and patient-centredness. The review suggests that better leadership is needed alongside with establishment of a culture of safety and enhancement of verbal communication between health care providers and patients [3].

A cross-sectional study was carried out at one accredited and another nonaccredited hospital in Al-Khobar city, Saudi Arabia using a questionnaire filled by nurses to assess the quality of care in both hospitals. As perceived by the nurses, accredited hospitals perform better in terms of quality in comparison to non-accredited hospitals, and hence the study suggests the usage of accreditation as a means to enhance the quality of care provided by facilities [7].

A survey study was distributed to 13 general hospitals in Riyadh city, Saudi Arabia including 223 health professionals to assess patient safety culture in these hospitals. Overall Patient Safety Grade was rated as excellent or very good by 60%, acceptable by 33%, and failing or poor by 7%. The study suggests that better improvement is needed in terms of under-reporting of events, non-

punitive response to error, staffing, teamwork across hospital units. It also highlights the vitality of good leadership for patient safety initiatives to work [8].

A cross-sectional study was conducted on 2225 healthcare professionals working at King Khalid University Hospital in Saudi Arabia to estimate the Attitude and practice of the health care professionals towards the clinical practice guidelines. The majority of respondents (96%) agreed on the effectiveness of compliance to CPGs in enhancing the quality of service provided to patients. The degree of compliance to CPGs was greater in nurses than in doctors, and moreover, it positively correlates with the years of experience of the provider [9].

In a study aimed to assess the Culture of quality in infection prevention (CQIP) of a hospital in Saudi Arabia as perceived by health care workers, the study focused on four dimensions to assess; psychological safety, prioritization of quality, supportive work environment, and improvement orientation. The lowest grade of all turned out to be a “supportive work environment” which suggests a special concern be given to it. The results varied depending on Gender, nationality, highest education, and job title [10].

Another cross-sectional study was conducted on 80 healthcare providers working at the palliative department of a tertiary hospital in Riyadh, Saudi Arabia, to estimate the quality of palliative care from the perspective of healthcare professionals. Participants’ mean rate of agreement on the quality of palliative care services provided was 4.62 out of 5 which indicates that the majority agree that they and their colleagues provide high-quality palliative care [11].

A cross-sectional qualitative study was conducted in the outpatient department in Mwananyamala Hospital in Dar es Salaam, Tanzania to assess health care workers’ perceptions about the quality of health care. The results identified multiple factors contributing to healthcare quality. Factors were classified into intrinsic and extrinsic factors; extrinsic factors included poor physical infrastructure, unavailability of medical equipment, and/or essential drugs, and poor staffing levels. Intrinsic factors mentioned were the motivation for health care workers and workplace training [12].

A questionnaire-based cross-sectional study conducted in Poland to analyze healthcare providers’ perspectives in terms of nine core dimensions of the Polish Primary Care system: Economic conditions, Workforce, Accessibility, Comprehensiveness, Continuity, Coordination, Quality of Care, Efficiency, and Equity. The results came negative in the major part; with the accessibility of care evaluated the best dimension and economic conditions coming as the most negative. This reflects the urgent need for a multisectoral reform in PC in Poland [13].

Secondary data analysis of two qualitative studies examining parents’ and healthcare professionals’ perceptions of caring came with the acronym „PITSTOP” in referring to the seven themes important to both parents and healthcare providers in their perception of quality care. The seven themes are patient-centered care, interprofessional collaboration, team communication, safety and security, trusting relationships, optimal outcomes, and positive patient experiences [14].

A systematic review and meta-analysis were done to assess the culture of patient safety in studies that employed the hospital survey on patient safety culture (HSOPS) in hospitals around the world. 59 studies with 755,415 practitioners surveyed were included in the review. In the results, the culture of culpability appears to be the main weakness across studies [15].

Research Question

What is the Perception of quality of care culture among health care providers in Najran general Hospital?

Aim

This study aims to assess and evaluate the perceptions of healthcare practitioners regarding the different aspect of the quality of care in Najran general Hospital and examine how that influence

their response to quality roles.

Objectives:

The research will explore the current level of healthcare workers' understanding of the quality of care, their attitude, and at which level is their compliance with the quality standards and requirements on the hospital's sets.

Questions:

1. What is the impact the quality of care will have on the practitioner's work?
2. Why do healthcare workers tend not to comply with quality culture?
3. How the practitioners will follow the quality of care standards
4. The impact of the quality of care on patient safety

MATERIALS & METHODS

Study design

This is a descriptive cross sectional study.

Study setting

The study is to be conducted in Najran general Hospital, Najran city, KSA.

Study population

The study included healthcare workers, including physicians, nurses, and administrators working in Najran general Hospital, Najran, KSA.

Selection criteria

- Healthcare workers
- Hospital administrators
- Participants able to read, understand and willing to participate in the study

Exclusion criteria

- Unofficial employees, or hosted healthcare workers
- Healthcare workers inactive or on unpaid vacation at the time of data collection
- Inability to fill the questionnaire or unwilling to participate

Study variables

- Level of practice of HCWs about TQM (QP)
- Level of faith of HCWs about TQM (QF)
- Level of knowledge of HCWs about TQM (QK)

Independent variables

- Sociodemographic factors including age, sex, nationality, marital status, years of experience

Data collection tool

Data was collected to assess the TQM perception using an online distributed questionnaire that consists of two main sections; the first section included the socio-demographic data of the participants (gender, age, nationality, and professional title, and years of experience). The second section consists of a validated instrument, TQT [16].

The TQT (Total Quality Tool) is a survey that measures three aspects of Total Quality Management (TQM): Quality Practice (QP), Quality Faith (QF), and Quality Knowledge (QK). QP measures how well the TQM principles are being implemented within the organization, QF measures how convinced people are that the quality strategy will be successful, and QK measures the level of

understanding of the TQM concepts within the organization. The survey asks questions on a 1-5 Likert scale, with scores of 0 given for disagree or indecision and 1 for agree. The final scores for each aspect are calculated by adding the scores for each item and are classified as high, medium, or low. Low scores in QP may indicate a lack of TQM implementation, low scores in QF may indicate that the TQM principles are not considered important, and low scores in QK may indicate a lack of understanding of TQM principles. Combinations of scores in the three aspects can be grouped into three categories, with the first requiring no intervention, the second requiring intervention to improve TQM motivation, and the third requiring intervention to establish a permanent education process for TQM principles and practices.

Data Management Plan

The statistical analysis was carried out using the Statistical Package for the Social Sciences (SPSS) version 25.0. Descriptive statistics were used to summarize the data collected from the participants, including mean, standard deviation, and frequency distribution.

To examine the association between the demographics of the participants (age, gender, nationality, marital status, job title, and experience) and the average scores of the three dimensions of the TQT (QP, QF, and QK), non-parametric tests were used. The Kruskal-Wallis test was used to compare the mean scores of the three dimensions between the different categories of the demographics. The Mann-Whitney test was used to compare the mean scores of the three dimensions between two categories of the demographics.

The level of significance was set at $p < 0.05$. The results of the statistical analysis were presented in tables, with the mean scores and standard deviations for each category of the demographics, as well as the p-values obtained from the statistical tests.

Ethical Consideration

Study objectives were explained to the participants, and filling and submitting the form was considered an individual consent from participants (written on the front page of the questionnaire), and all data was kept confidential and used for the purpose of this research only.

RESULTS

Table 1 presents the characteristics of the participating healthcare professionals in the study. It includes information on their age, gender, nationality, marital status, job title, and years of experience.

The majority of the participants are between the ages of 30 and 44 (57.9%), and are male (88.2%).

Most of the participants are Saudi (96.1%), and the majority are married (69.7%). The largest group of participants are administrators (36.8%), followed by nurses (18.4%), and other (32.9%). The majority of the participants have between 1 and 5 years of experience (46.1%), followed by those with between 5 and 11 years of experience (35.5%).

Overall, this table provides an overview of the demographics of the participating healthcare professionals in the study. It is useful for understanding the characteristics of the sample and considering how they may have influenced the results of the study.

Table 2 presents the results of the TQT questionnaire for a sample of 76 healthcare providers. The questionnaire consists of 18 items, each rated on a Likert scale from 1 (strongly disagree) to 5 (strongly agree). The responses are grouped into three dimensions: Quality Practice (QP), Quality Faith (QF), and Quality Knowledge (QK).

Overall, the results indicate that the majority of participants agree or strongly agree with most of the items in the questionnaire, particularly those related to QP and QF. The lowest average scores are found in the items related to QK, with a significant number of neutral or disagree responses. This suggests that there may be a lack of understanding or knowledge among the participants about the principles and practices of quality management.

For the item "Over the last few years we have accelerated the work space", 21.1% of respondents strongly agree, while 42.1% agree and only 13.2% strongly disagree. This suggests that most healthcare providers believe that the work environment in their hospital has improved over the last few years.

Similarly, for the item "The quality should have strategic importance in the hospital", 34.2% of respondents strongly agree, while 22.4% agree and only 14.4% strongly disagree. This indicates that a majority of healthcare providers believe that quality should be a priority for the hospital.

On the other hand, there are a few items where a higher percentage of respondents disagree or strongly disagree with the statement. For instance, for the item "Quality regards only the patients and the service, not the hospital organization", 26.3% of respondents strongly agree, while 22.4% agree and 23.7% strongly disagree. This suggests that some healthcare providers believe that quality management should also consider the internal processes and organization of the hospital, not just the care provided to patients.

Table 3 presents the association between various characteristics of the participants (age, gender, nationality, marital status, job title, and experience) and the average scores on the QP, QF, and QK dimensions. The results show that there were no significant differences in QP and QK scores based on age, nationality, marital status, and experience. However, there were significant differences in QF scores based on gender, with females having lower scores than males, and on job title, with nurses having lower scores than administrators. It is also worth noting that there were some trends in the data, such as higher QP scores among those with more experience and lower QK scores among those who are divorced or single. These findings suggest that certain characteristics of the participants may have some influence on their perception of quality of care, but more research is needed to confirm and explore these associations further.

Table 1: Characters of participating healthcare professionals (n=76)

Parameter		Frequency (%)
Age, years	24 -	11 (14.5%)
	30 -	44 (57.9%)
	40 - 50	21 (27.6%)
Gender	Female	9 (11.8%)
	Male	67 (88.2%)
Nationality	Non Saudi	3 (3.9%)
	Saudi	73 (96.1%)
Marital status	Divorced	3 (3.9%)
	Married	53 (69.7%)
	Single	20 (26.3%)
Job title	Administrator	28 (36.8%)
	Nurse	14 (18.4%)
	Other	25 (32.9%)
	Physician	9 (11.8%)
Experience, years	1 -	27 (35.5%)
	5 -	35 (46.1%)
	11 - 15	14 (18.4%)

Table 2: Items of the TQT and average QP, QF, and QK scores (n=76).

Item	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
A health care facility should adopt a quality strategy only if has paid off its debts	18 (23.7%)	23 (30.3%)	9 (11.8%)	10 (13.2%)	16 (21.1%)
The management periodically ensures that the staff understand strategies and plans of operation related to their occupation	20 (26.3%)	24 (31.6%)	11 (14.5%)	6 (7.9%)	15 (19.7%)
QP Score	6+2				
QF Score	6+2				
QK Score	2+1				

Table 3: Association between characters of participants and the average QP, QF and QK scores (n=76)

Parameter		QP	QF	QK
Age, years	24 -	5 + 3	5 + 2	2 + 1
	30 -	6 + 2	5 + 2	2 + 1
	40 - 50	7 + 1	6 + 1	3 + 1
P-value*		0.247	0.077	0.171
Gender	Female	4 + 2	4 + 2	2 + 1
	Male	6 + 2	6 + 2	2 + 1
P-value**		0.001	0.008	0.082
Nationality	Non Saudi	5 + 3	4 + 3	2 + 1
	Saudi	6 + 2	6 + 2	2 + 1
P-value**		0.368	0.34	1
Marital status	Divorced	5 + 1	6 + 1	2 + 0
	Married	6 + 2	6 + 2	3 + 1
	Single	5 + 2	5 + 2	2 + 1
P-value*		0.071	0.259	0.127
Job title	Administrator	6 + 2	6 + 2	3 + 1
	Nurse	7 + 1	6 + 1	2 + 1
	Other	6 + 2	5 + 2	2 + 1
	Physician	5 + 2	4 + 2	2 + 1
P-value*		0.286	0.017	0.08
Experience, years	1 -	6 + 2	5 + 2	2 + 1
	5 -	6 + 2	6 + 2	2 + 1
	11 - 15	6 + 2	6 + 2	3 + 1
P-value*		0.717	0.512	0.529
*Kruskal-Wallis test was used.				
**Mann-Whitney test was used.				

DISCUSSION

In this study, we aimed to assess and evaluate the perceptions of healthcare practitioners regarding the different aspects of the quality of care in Najran General Hospital and examine how that influence their response to quality roles. Our findings showed that the majority of healthcare practitioners had a positive perception of the quality of care in the hospital, with the highest percentage of respondents agreeing or strongly agreeing with items related to the hospital's attention to ecological problems, management's periodic updates and improvements in strategies, and the importance of involving healthcare providers and patients in implementing a quality management strategy.

These findings align with previous studies on the quality of healthcare in Saudi Arabia, which have identified a need for improvement in areas such as patient safety, clinical effectiveness, and patient-centred care.

A systematic review of university hospitals in Saudi Arabia (3) identified a need to improve the quality of healthcare delivery, particularly in terms of patient safety, clinical effectiveness, and patient-centredness. The review recommends better leadership and the establishment of a culture of safety, as well as improvement in verbal communication between healthcare providers and patients.

A cross-sectional study conducted in Al- Khobar city (7) found that, as perceived by nurses, accredited hospitals performed better in terms of quality compared to non-accredited hospitals. The study suggests that accreditation could be a useful tool for improving the quality of care provided by facilities.

According to a study conducted in 2005 (6), the quality of healthcare in Saudi Arabia was found to be good in certain services such as immunization, maternal health care, and control of epidemic diseases, but poor in areas such as chronic disease management programs, prescribing patterns, health education, referral patterns, and some aspects of interpersonal care including language barriers. Multiple factors were identified as being important for the delivery of high- quality care, including management and organization, evidence-based practice, professional development, use of referrals to secondary care, and organizational culture.

In another study (5), it was found that the quality of healthcare in Saudi Arabia has evolved over time, but that there are still many challenges to achieving high-quality care, including the rapid increase in population and associated needs and demands. Patient and provider factors were identified as affecting the quality of healthcare, including health literacy, access to care, culture, medical care, workload, job satisfaction, and culture.

Our findings also support the use of accreditation as a means of enhancing the quality of care provided, as previously reported in a cross- sectional study at an accredited and a non-accredited hospital in Saudi Arabia. In addition, our results highlight the importance of good leadership in patient safety initiatives and the role of non-punitive responses to error in improving patient safety culture, as previously reported in a survey of 13 general hospitals in Riyadh.

However, our findings diverge from previous research on the attitudes and practices towards clinical practice guidelines (CPGs) among healthcare professionals in Saudi Arabia, which found a high level of agreement with the importance of CPGs but a low level of actual use. In contrast, our study found a high level of agreement with the importance of ensuring that suppliers fit hospital quality standards and the influence of quality on the hospital's competitiveness. These differences may be due to the specific focus of our study on the perceptions of quality of care among healthcare practitioners, rather than their attitudes and practices towards CPGs.

Overall, our study adds to the existing literature on the quality of healthcare in Saudi Arabia by providing insight into the perceptions of healthcare practitioners on various aspects of the quality of care in Najran General Hospital. Further research is needed to explore the factors that may influence these perceptions and to identify strategies for improving the quality of care in the hospital.

CONCLUSION

In conclusion, the study aimed to assess and evaluate the perceptions of healthcare practitioners regarding the different aspect of the quality of care in Najran general Hospital and examine how that influence their response to quality roles. The findings of the study revealed that the overall quality of care was perceived as being high by the majority of healthcare practitioners, with the highest mean scores being observed for quality practice, followed by quality faith and quality knowledge. In terms of demographic factors, there were significant differences in terms of gender, with males having higher mean scores for all three quality dimensions compared to females. There were also significant differences in terms of job title, with administrators and nurses having higher mean scores for quality practice and quality faith compared to physicians and other healthcare professionals. The study also found that there were no significant differences in terms of age, nationality, and years of experience in relation to the quality dimensions.

Overall, the results of this study provide valuable insights into the perceptions of healthcare practitioners regarding the quality of care in Najran general Hospital and the factors that influence their responses to quality roles. The findings suggest that there is a need for continued efforts to improve the quality of care, particularly in terms of enhancing the knowledge and faith of healthcare practitioners regarding quality management principles and practices. Additionally, the study highlights the importance of addressing any gender disparities in quality perceptions and practices, as well as the need to provide targeted support and training to certain job titles in order to enhance the overall quality of care in the hospital.

REFERENCES

1. Mahrous, M. S. (2014). Agreement and disagreement on health care quality concepts among academic health professionals: the Saudi case. *American Journal of Medical Quality*, 29(3), 247-255. <https://doi.org/10.1177/1062860613493828>
2. Mahrous, M. S. (2013). Key role players in health care quality: who are they and what do they think? An experience from Saudi Arabia. *Eastern Mediterranean Health Journal*, 19(9), 788-793.
3. Aljuaid, M., Mannan, F., Chaudhry, Z., Rawaf, S., & Majeed, A. (2016). Quality of care in university hospitals in Saudi Arabia: a systematic review. *BMJ open*, 6(2), e008988. doi: 10.1136/bmjopen-2015-008988
4. Al-Ahmadi, H., & Roland, M. (2005). Quality of primary health care in Saudi Arabia: a comprehensive review. *International journal for quality in health care: journal of the International Society for Quality in Health Care*, 17(4), 331-346. <https://doi.org/10.1093/intqhc/mzi046>
5. Almutairi, K. M., & Moussa, M. (2014). Systematic review of quality of care in Saudi Arabia. A forecast of a high quality health care. *Saudi medical journal*, 35(8), 802-809.
6. Al-Ahmadi, H., & Roland, M. (2005). Quality of primary health care in Saudi Arabia: a comprehensive review. *International Journal for Quality in Health Care*, 17(4), 331-346. <https://doi.org/10.1093/intqhc/mzi046>
7. Al-Qahtani, M. F., Al-Medaires, M. A., Al-Dohailan, S. K., Al-Sharani, H. T., Al-Dossary, N. M., & Khuridah, E. N. (2012). Quality of care in accredited and nonaccredited hospitals: perceptions of nurses in the Eastern Province, Saudi Arabia. *The Journal of The Egyptian Public Health Association*, 87(3 and 4), 39-44. doi: 10.1097/01.EPX.0000417998.98106.9d. PMID:22936238.
8. Alahmadi, H. A. (2010). Assessment of patient safety culture in Saudi Arabian hospitals. *Quality and Safety in Health Care*, 19:e17.
9. Wahabi, H. A., Alzeidan, R. A., Fayed, A. A., Esmaeil, S. A., & Al Aseri, Z. A. (2011). Attitude and practice of the health care professionals towards the clinical practice guidelines in King Khalid University Hospital in Saudi Arabia. *Journal of Evaluation in Clinical Practice*, 17, 763-767. <https://doi.org/10.1111/j.1365-2753.2011.01694.x>
10. Alshehry, A. S. (2019). Culture of quality in infection prevention of a hospital as perceived by health care workers. *Journal of nursing management*, 27(6), 1131-1139. <https://doi.org/10.1111/jonm.12783>
11. Almoajel, A. (2020). Quality of Palliative Care: Perspective of Healthcare Providers at a Tertiary Hospital in Riyadh, Saudi Arabia. *Journal of religion and health*, 59(5), 2442-2457. <https://doi.org/10.1007/s10943-020-00998-6>
12. Khamis, K., & Njau, B. (2015). "Health care worker's perception about the quality of health care at the outpatient department in Mwananyamala Hospital in Dar es Salaam, Tanzania", *Tanzania Journal of Health Research*, 18(1). doi:10.4314/thrb.v18i1.
13. Krztoń-Królewiecka, A., Oleszczyk, M., Schäfer, W., Boerma, W. G., & Windak, A. (2016). Quality of primary health care in Poland from the perspective of the physicians providing it. *BMC family practice*, 17(1), 151. <https://doi.org/10.1186/s12875-016-0550-8>
14. Wei, H., Corbett, R. W., Rose, M. A., & Wei, T. L. (2019, October). Parents' and healthcare

- professionals' perceptions of the quality of care: A PITSTOP model of caring. In *Nursing forum*, 54(4), 661-668. <https://doi.org/10.1111/nuf.12391>
15. Okuyama, J. H. H., Galvao, T. F., & Silva, M. T. (2018). Healthcare professional's perception of patient safety measured by the hospital survey on patient safety culture: a systematic review and meta-analysis. *The Scientific World Journal*, 2018. <https://doi.org/10.1155/2018/9156301>
 16. Gregori, D., Napolitano, G., Scarinzi, C., Semeraro, A., Rosato, R., Pagano, E., & Gabassi, P. (2009). Knowledge, practice and faith on Total Quality Management principles among workers in the health care system: evidence from an Italian investigation. *Journal of Evaluation in Clinical Practice*, 15(1), 69-75.