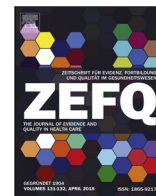




Contents lists available at ScienceDirect

Z. Evid. Fortbild. Qual. Gesundh. wesen (ZEFQ)

journal homepage: <http://www.elsevier.com/locate/zefq>

Qualität und Sicherheit in der Gesundheitsversorgung / Quality and Safety in Health Care

## Quality of care as an individual concept: Proposition of a three-level concept for clinical practice

### *Versorgungsqualität als individuelles Konzept: Vorschlag für ein Drei-Ebenen-Modell für die klinische Praxis*

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## ARTICLE INFO

## Article History:

Received: 7 March 2022

Received in revised form: 2 May 2022

Accepted: 4 May 2022

Available online: xxxx

## Keywords:

Quality in health care

Supervision

Team leadership

Excellence of care

## ABSTRACT

**Background:** Quality in health care is a complex framework with many components. The word “quality” is used in different official settings and different contexts (public health, certification, patient safety). On individual and team levels, the perception of quality is heterogeneous, and the term is often used beyond the theoretical framework. Therefore, it remains a challenge to describe the perceived quality of care in the clinical setting. The aim of this paper is to present a simple concept that can be used to visually define the perceived quality of care for the individual health care professional.

**Methods/concept:** An experience-based concept that uses different levels of “quality of care” individually to guide the supervision of health care professionals (residents) and quality goal setting in teams is presented, with the assumption that the ambition of any health care professional is to provide excellence in care. Three perceived levels of quality of care are defined, described, and visualized, namely, a) security, b) comfort, and c) perfection. The “comfort level” defines a sustainable level of care where the optimal balance between good patient care and resource use is achieved. Excellence of care is located between the comfort and the perfection level. The practical application of this proposed concept is described in three settings, namely, 1) the threshold for asking advice from the supervisor (resident physicians), 2) in supervision/coaching discussions between residents and supervisors, and 3) in the analysis of perceived quality of care and goals setting within the team.

**Conclusion:** A simplified, purpose-built but well-defined concept to visually depict the perception of quality of care by clinicians can be useful in clinical practice, for the supervision of residents and for team dynamics.

## ARTIKEL INFO

## Artikel-Historie:

Eingegangen: 7. März 2022

Revision eingegangen: 2. Kann 2022

Akzeptiert: 4. Kann 2022

Online gestellt: xxxx

## Schlüsselwörter:

Versorgungsqualität

Supervision

Teamführung

Versorgungsexzellenz

## ZUSAMMENFASSUNG

**Hintergrund:** Qualität in der Gesundheitsversorgung ist ein komplexes Konzept mit vielen Komponenten. Das Wort «Qualität» wird in verschiedenen offiziellen Zusammenhängen und in unterschiedlichen Kontexten (öffentliche Gesundheit, Zertifizierung, Patientensicherheit) verwendet. Auf individueller und institutioneller, hier auf Teamebene ist die Wahrnehmung von Qualität heterogen, und der Begriff wird oft außerhalb des theoretischen Rahmens verwendet. Daher bleibt es eine Herausforderung, die wahrgenommene Qualität der Pflege im klinischen Umfeld zu beschreiben. Ziel dieses Beitrags ist es, ein einfaches Konzept vorzustellen, mit dem sich die wahrgenommene Qualität der Gesundheitsfachpersonen visuell darstellen lässt.

**Methoden/Konzept:** Es wird ein erfahrungsbasiertes Konzept vorgestellt, das verschiedene Niveaus der «Qualität der Pflege» individuell nutzt, um die Supervision von Ärzt:innen in Aus- und Fortbildung und die Festlegung von Qualitätszielen in Teams zu leiten, wobei davon ausgegangen wird, dass es das Bestreben einer jeden Gesundheitsfachperson ist, eine hervorragende Qualität zu bieten. Es werden drei wahrgenommene Ebenen der Behandlungsqualität definiert, beschrieben und visualisiert, nämlich a)

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Sicherheit, b) Komfort und c) Perfektion. Das «Komfortniveau» definiert ein nachhaltiges Niveau der Behandlungsqualität, bei dem ein optimales Gleichgewicht zwischen guter Patientenversorgung und Ressourcennutzung erreicht wird. Exzellenz ist die Zone zwischen dem Komfort- und dem Perfektionsniveau. Die praktische Anwendung dieses vorgeschlagenen Konzepts wird in drei Bereichen beschrieben, nämlich 1) bei der Schwelle für die Inanspruchnahme von Ratschlägen durch den Vorgesetzten (Assistenzärzt:innen), 2) bei Supervisions-/Coachinggesprächen zwischen Assistenz-/Oberärzt:innen und Vorgesetzten und 3) bei der Analyse der wahrgenommenen Pflegequalität und der Zielsetzung innerhalb des Teams.

**Schlussfolgerung:** Ein vereinfachtes, zweckmäßiges, aber gut definiertes Konzept zur visuellen Darstellung der Wahrnehmung von Behandlungsqualität durch die klinisch tätige Fachperson kann in der klinischen Praxis für die Supervision und die Teamdynamik nützlich sein.

## Background

In the ancient world the motto “*primum non nocere, secundum cavere, tertium sanare*” has been a very first attempt to create a general understanding of qualitative aspects in medicine. Especially in the last decades, research has been increasingly devoted to this topic and various concepts for measuring and improving medical services have been developed. While Donabedian propagated the dimensions of structural, process and outcome quality [1], the Institute of Medicine focuses on 6 aims: safe, effective, timely, patient-centered, efficient and equitable care [2]. Finally, Porter sees added value for the patient as a central concern of good quality medical care [3].

While these concepts may lend themselves well to building measurement systems, monitoring cycles, and reporting, they are often far too complex to provide useful guidance to individuals in their daily work. Therefore, employees and teams today are forced to define their own quality requirements for daily use, and the approaches to this are correspondingly heterogeneous [4].

Society and the government are increasingly demanding that the quality of medical services be measured and made available to patients as a basis for decision-making. In Switzerland, for example, 15 quality indicators as patient satisfaction or infection rates have been published for years by the organization ANQ [5]. The new national quality contract between one association of Swiss hospitals (“H+<sup>TM</sup>”) and the health insurers defines topics and obliges the hospitals to implement defined measures [6].

It can be assumed that this societal pressure has brought the topic even more to the fore among medical staff and has further strengthened the already high intrinsic motivation to provide patients with high-quality treatment and care.

The perception of quality of care is extremely subjective on the level of the individual patient and it differs from the perception of quality of healthcare professionals, and among the latter, differences can also be discerned between the various professional groups [4]. In addition, the term “quality of care” applies differently in different settings and different organizational levels. Today, we try to measure individual qualitative aspects of medical services with indicators, but we cannot capture the perceived quality in its entire complexity. Hanefeld et al. describe the various dependencies in the patient’s perception of quality and refers to factors such as human interaction, time courses, cultural needs and social influences [7].

Nurses and physician alike, are increasingly confronted with shortage of skilled worker especially on the primary care level [8–10]. This shortage leads, especially on a nursing level (missing nursing), to measurable decrease of quality of care [11,12]. The consequences are, on the level of the individual employee, job dissatisfaction and intention to leave [8]. For the patient this shortage leads to a clear decrease of quality of care in multiple

nursing-sensitive patient outcome, well described in the study of Blume et al. [13].

Healthcare professionals strive to provide high-quality care. They depend on a good resilience to maintain performance in a challenging work environment. Resilience is associated with the sense of coherence. A framework for resilience by Anthonovsky et al, describing three important elements of resilience: 1) feasibility, 2) comprehensibility, and 3) meaningfulness [14]. Consequently, the inability to provide high quality care to a patient is a source of stress and dissatisfaction for professionals by reducing the feasibility component of the sense of coherence. This stress can lead to exhaustion or even burnout [15].

Healthcare professionals often use the term “quality levels” outside of its theoretical framework. In our experience, the most common uses of “quality level” are as follows: It is used on an individual level to describe a personal ambition to provide good care. On a team level, it is used to determine the overall performance of a team relating to patient care. On an institutional level, it is used to define the desired level of care for patients often defined by a rigid standard of care, leaving few opportunities for the health care practitioner for adapt these to the needs of the patient.

Since quality of care and the corresponding term “quality level” are complex concepts, there is no single comprehensive tool in existence to summarize or measure this concept for practical purposes [7].

To address this issue, this paper describes a purpose-built three-level quality of care concept to visualize perceived quality of care in the daily clinical practice of Swiss inpatient nursing and physician healthcare professionals.

## Methods

### *Development of the concept*

Because of the difficulty to explain and apply the concept of “quality of care levels” in daily practice, the author (ASE) developed a comprehensive and simple concept, based on his experience as a supervisor. The original setting in which this concept was developed was the inpatient internal medicine ward, presently the concept is used in the inpatient palliative care ward, both in Switzerland.

By acknowledging that the notion of “quality levels” is subjective but that the goal of every healthcare professional is to provide excellent care [16], a three-level framework was developed, namely, the 1) security level, 2) comfort level, and 3) perfection level.

### *The three levels of the concept*

The security level describes the minimal level of perceived quality to secure patient safety. Therefore, it is the most undesirable

level of quality of care. The reasons for maintaining this level could be a lack of resources or, more rarely, a lack of competency. Independent of the reasons, this level creates different types of stress.

For the individual healthcare professional, the discrepancy between the desired excellence and the resources (institutional or personal) can create a feeling of critically reduced feasibility to provide excellent quality care. In consequence, there is reduced resilience, according to the sense of coherence model of Antonovsky [14]. On a team level, it can lead to frustration and burnout [15]. For a healthcare institution, the risk of critical incidents or severe events increases [17].

The comfort level describes a balance between perceived quality of care and resources. Patient care requires an optimal balance between the ambition of the healthcare professional to strive for perfection and the constraint of the limited resources. The healthcare professional feels comfortable with the level of quality of care. We believe that this level is the most sustainable, and, therefore, it is advantageous to individual clinicians (sense of feasibility), the team (sustained sense of providing good care), and the institution (optimal balance between quality of care and resource needs).

The perfection level describes the highest level of perceived quality. Perfection [18], is the absence of error, fault or defects and can by definition not be attained. Patient care aimed at perfection requires a high number of resources. This level, even though it might be desirable in theory, is not achievable nor maintainable in the long term. It could be aimed for in the short term in a focused manner to overcome critical problems in the clinical setting, related to academic issues, or in management of the patient or similar. The required resources are rapidly depleted, and similar to the lowest level, this creates stress. On an individual and team level, a constant striving for perfection can lead to burnout or, at minimum, reduce resilience [19,20]; on an institutional level, the increased requirements for resources will create unsustainable strain on finances and logistics.

#### Excellence of care

Excellence of care, is the striving for outstanding and valuable quality of care [21,22]. It is achievable and excellence of care can be a realistic and sustainable goal for the individual healthcare

professional and institution. [22]. Consequently, institutions usually strive for excellence in care [22]. We locate, “excellence of care” in the middle third, between the comfort and perfection levels, addressing both the optimal balance described as the “comfort level” and the general desire of most health care professional to provide perfect care (Figure 1).

#### Results

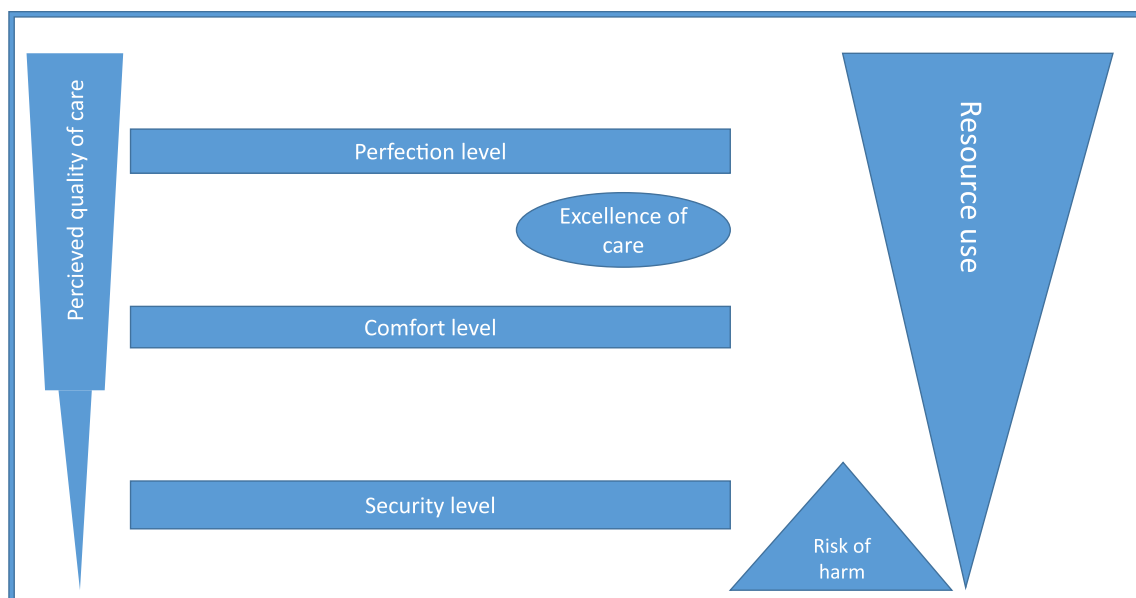
The authors use the concept in three different situations in the inpatient setting.

The first situation, which initiated the development of the concept, involves defining the threshold for residents to ask for help or advice from supervisors. A typical question from the residents on the ward or on call is “when do I ask the supervisor for assistance?” This threshold is probably highly individual. Some supervisors may require an extremely low threshold to inform themselves closely regarding the situation on the ward. Others might prefer to only be informed about critical situations and problems on the ward. A logical and comforting response to this question is to describe the three-level concept and to ask them to call the supervisor once they feel that they are below their personal “comfort level” Oral feedback from the residents were positive about this approach.

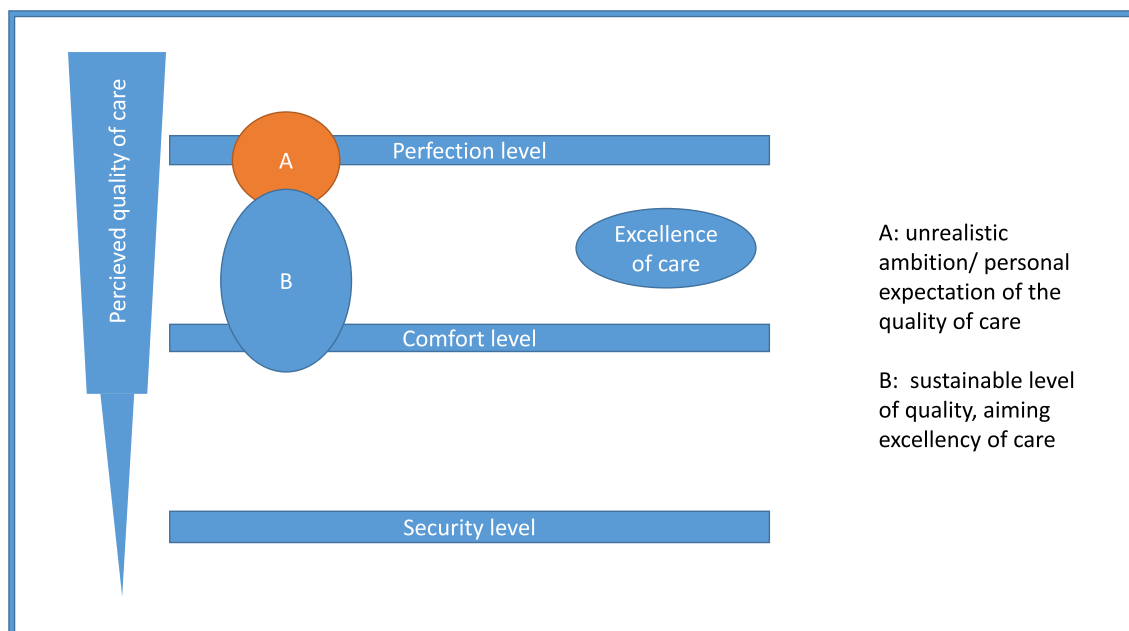
The second situation involves supervising discussions with the theme of the balance between personal ambitions and resources with residents. Perfectionism that depletes personal resources and creates stress and the risk of burnout is often the main driver of such discussions (See Figure 2).

The discussion should include locating the residents personal expectation of quality of care within the framework, discussing the risks of perfectionism, and illustrating the difference between excellence and perfectionism, which can be helpful in these situations. The goal of these discussions is to explain that perfectionism is not attainable or sustainable and that supervisors mostly require excellence with the available resources, which is the level between “comfort” and “perfection.”

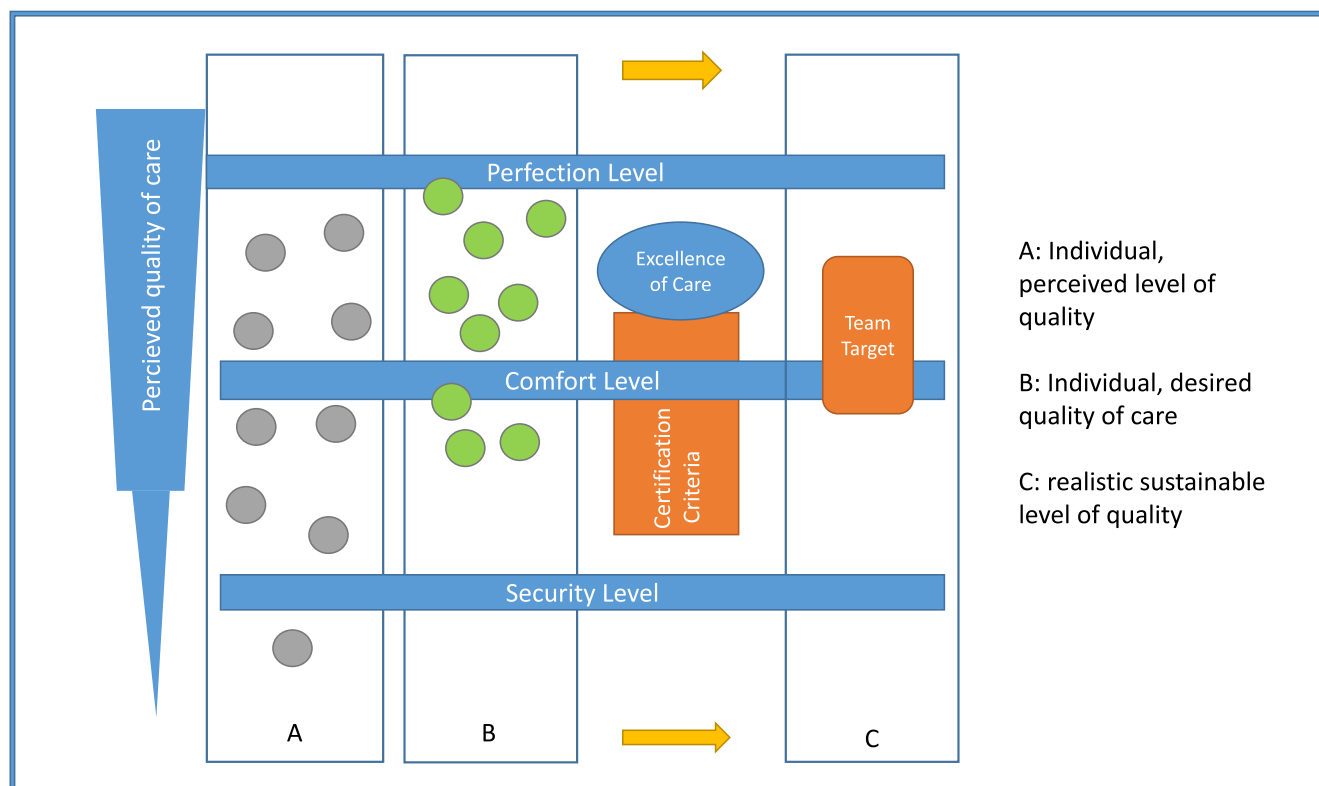
The third situation involves discussing perceived quality of care with a team/unit and defining the goals of this important subject Figure 3. There are often differences between the perceived, desired, and realistically attainable levels of quality of care in teams,



**Figure 1.** Visual description of the three levels and their relation to resource use, risk of harm, and perceive quality of care. (© artwork by the author).



**Figure 2.** Example of a practical use of the framework in the setting of a coaching discussion. (© artwork by the author).



**Figure 3.** Example of a practical use in the setting of goal setting with a team. (© artwork by the author).

and this probably contributes to a healthy team dynamic. Similar to the situation of the discussion with individual residents, first, the perceived and desired level of quality are located visually. Then, in a second step, required level of quality (governing board, society) is located on the framework. In our opinion, the official certification criteria are often a compromise between excellence and required resources, because the criteria have to be applied to a heterogeneous and rather broad array of institutions [23].

Therefore, there are elements of both minimal requirements and a solid level, and the criteria are located between the security and comfort level.

Once the perceived, desired and required level of quality of care are located within the concept, the group discusses which level of quality is realistically sustainable. Afterwards, the required efforts and, if applicable, required changes, are defined and planned to achieve the targeted level. We recommend, that if the process defi-

ned by this concept succeeds, changes needed to achieve the new quality level should be aligned with the organizational quality goals.

## Discussion

Our concept to discuss on an individual or team basis the perceived level of quality of care and to use it as a guidance for supervision/coaching or definition of goals within a team, is to our best knowledge, unique. In Switzerland, most of the time the quality level are formally defined either by quality criteria/rules of the local institution (hospital), the national association for quality development in hospitals (ANQ [5] or the specialist society in charge of certifying the institution (p.e.qualite-palliative.ch; [23]). Therefore, the strength of our concept is the implication of the individual health care professional into the reflection about “quality of care.”

There are inherent limitations to this concept. First, it is based on a personal concept of the author (ASE) and has not been tested against a theoretical framework of quality of care. Second, its use has not been validated scientifically. Third, the individually or team-based perception of quality of care does not necessarily align with the quality goal of the institution. Fourth, the focus on perceived quality of care depends on individual judgement. Theoretical level of quality could significantly decrease because the because individual healthcare professionals could pursue lower quality targets. We do not think that this is a significant issue, because, in a healthcare team, most members do strive for excellence. Therefore, those who do strive will probably always outnumber those with less ambition to strive toward quality.

## Conclusion

Our three-level concept of quality of care seems to be useful in the daily clinical and supervising work in the inpatient setting, both on an individual level (supervising residents) and on a team level (discussion and visualizing quality levels and their associated goals). Therefore, we think that it has the potential to be further developed or scientifically assessed, and we encourage anyone who is interested to do so.

## Conflict of interest

None declared.

## CRedit author statement

Andreas Samuel Ebnetter: Conceptualization, Methodology, Validation, Writing-Original Draft.

Ronald Vonlanthen: Validation, Writing-review and Editing.

Steffen Eychemueller: Validation, Resources, Writing – Review and Editing, Supervision.

## References

- [1] Donabedian A. Evaluating the quality of medical care. *Milbank Mem Fund Q* 1966;44(Suppl):166–206.
- [2] Crossing the Quality Chasm. A New Health System for the 21st Century. Washington, D.C.: National Academies Press; 2001. <https://doi.org/10.17226/10027>.
- [3] Porter ME. Redefining health care: Creating value-based competition on results. Mass, Boston: Harvard Business School Press; 2006.
- [4] Willems J, Ingerfurth S. The quality perception gap between employees and patients in hospitals. *Health Care Manage Rev* 2018;43:157–67. <https://doi.org/10.1097/HMR.0000000000000137>.
- [5] ANQ – Swiss National Association for Quality Development in Hospitals and Clinics, ANQ. (n.d.). <https://www.anq.ch/en/> (accessed November 8, 2021).
- [6] Qualitätsvertrag KVG – H+ Die Spitäler der Schweiz. (n.d.). <https://www.hplus.ch/de/qualitaet/qualitaetsvertrag-kvg> (accessed February 14, 2022).
- [7] Hanefeld J, Powell-Jackson T, Balabanova D. Understanding and measuring quality of care: Dealing with complexity. *Bull World Health Org* 2017;95:368–74. <https://doi.org/10.2471/BLT.16.179309>.
- [8] Alsubhi H, Meskell P, Shea DO, Doody O. Missed nursing care and nurses' intention to leave: An integrative review. *J Nurs Manag* 2020;28:1830–40. <https://doi.org/10.1111/jonm.13069>.
- [9] Kirch DG, Petelle K. Addressing the physician shortage: The peril of ignoring demography. *JAMA* 2017;317:1947. <https://doi.org/10.1001/jama.2017.2714>.
- [10] Zeller A, Giezendanner S. Resultate der 4. Workforce Studie. *Prim Hosp Care Allg Inn Med* 2020. <https://doi.org/10.4414/phc-d.2020.10311>.
- [11] Chaboyer W, Harbeck E, Lee B-O, Grealish L. Missed nursing care: An overview of reviews. *Kaohsiung J Med Sci* 2021;37:82–91. <https://doi.org/10.1002/kjm2.12308>.
- [12] Kalánková D, Kirwan M, Bartoníčková D, Cubelo F, Žiaková K, Kurucová R. Missed, rationed or unfinished nursing care: A scoping review of patient outcomes. *J Nurs Manag* 2020;28:1783–97. <https://doi.org/10.1111/jonm.12978>.
- [13] Blume KS, Dietermann K, Kirchner-Heklau U, Winter V, Fleischer S, Kreidl LM, Meyer G, Schreyögg J. Staffing levels and nursing-sensitive patient outcomes: Umbrella review and qualitative study. *Health Serv Res* 2021;56:885–907. <https://doi.org/10.1111/1475-6773.13647>.
- [14] Antonovsky H, Sagy S. The development of a sense of coherence and its impact on responses to stress situations. *J Soc Psychol* 1986;126:213–25.
- [15] Tawfik DS, Scheid A, Profit J, Shanafelt T, Trockel M, Adair KC, Sexton JB, Ioannidis JPA. Evidence relating health care provider burnout and quality of care: A systematic review and meta-analysis. *Ann Intern Med* 2019;171:555. <https://doi.org/10.7326/M19-1152>.
- [16] Mintzberg H. Managing the myths of health care: Bridging the separations between care, cure, control, and community. first ed. Oakland, CA: Berrett-Koehler Publishers Inc; 2017.
- [17] Bergman S, Deban M, Martelli V, Monette M, Sourial N, Hamadani F, Teasdale D, Holcroft C, Zakrzewski H, Fraser S. Association between quality of care and complications after abdominal surgery. *Surgery* 2014;156:632–9. <https://doi.org/10.1016/j.surg.2013.12.031>.
- [18] Definition of PERFECTION (n.d.). <https://www.merriam-webster.com/dictionary/perfection> (accessed February 1, 2022).
- [19] Craiovan PM. Correlations between perfectionism, stress, psychopathological symptoms and burnout in the medical field. *Proc – Soc Behav Sci* 2014;127:529–33. <https://doi.org/10.1016/j.sbspro.2014.03.304>.
- [20] Galiana L, Sansó N, Muñoz-Martínez I, Vidal-Blanco G, Oliver A, Larkin PJ. Palliative care professionals' inner life: Exploring the mediating role of self-compassion in the prediction of compassion satisfaction, compassion fatigue, burnout and wellbeing. *J Pain Symptom Manage* 2022;63:112–23. <https://doi.org/10.1016/j.jpainsymman.2021.07.004>.
- [21] Crotts JC, Dickson DR, Ford RC. Aligning organizational processes with mission: The case of service excellence. *Acad Manag Perspect* 2005;19:54–68. <https://doi.org/10.5465/ame.2005.18733215>.
- [22] Sharkey K, Meeks-Sjostrom D, Baird M. Challenges in sustaining excellence over time. *Nurs Adm Q* 2009;33:142–7. <https://doi.org/10.1097/NAQ.0b013e3181a10cf3>.
- [23] qualit epalliative – Schweizerischer Verein f ur Qualit at in Palliative Care. (n.d.). <https://www.qualitepalliative.ch/> (accessed January 13, 2022).