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The evaluation of personnel leasing as a flexible work model in professional satisfaction among nurses and in the quality of provided nursing care

Apostolos Kolokythas¹ , Maria Noula² , Monica Nikitara² , Zoe Roupa² 

¹University Medical Centre Knappschaft, Bochum, Germany

²Department of Life and Health Sciences, University of Nicosia, Nicosia, Cyprus

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Corresponding author: Apostolos Kolokythas, Espenstrasse 30, 44143, Dortmund, Germany
E-mail: Apostolos.kolokythas@hotmail.com,
Tel. + 491742156164

Summary: Healthcare represents a critical employment sector, recognized for its dynamism in development and future prospects. Continuous evolution in this field necessitates reforms to achieve economically efficient and higher quality health services. Despite the shortage of nursing staff, there is a growing importance of personnel scheduling as a form of employment within the sector. Despite the potential instability associated with this work arrangement, it offers relief from temporary absences from the workplace. However, concurrently, there arises the possibility of negative impacts on the quality of nursing care, especially concerning coherence and coordination in patient care delivery.

Methodology: A literature review was conducted by searching data in scientific databases such as PubMed and SpringerLink, seeking information available up until November 2023.

INTRODUCTION

In recent years, the healthcare sector has experienced substantial shifts in job role structures and operations. There have been notable shortages in personnel, alarmingly long hiring periods for permanent staff, and fluctuations in the demand for nursing professionals, both anticipated and unforeseen, accompanied by increased absences and alterations in the permanent staff composition [1].

As a result, there has been a significant rise in the demand for temporary healthcare workers through staffing agencies [2].

Due to the increasing aging population and a decrease in the active workforce, the provision of healthcare services and care is consistently facing mounting pressure. The demands for finding capable and specialized personnel are continually rising. The aforementioned sources highlight the existing challenge of persistent staffing shortages in the nursing sector, a situation further exacerbated during the COVID-19 pandemic [3].

Recent technological and organizational changes in the workplace have led to the widespread introduction of non-standard forms of employment. Consequently, there is an increased prevalence of precarious work, in the form of personnel leasing. Personnel leasing, also known as temporary work, constitutes a distinct type of employment with unique characteristics and dynamics. In personnel leasing, the employee provides services to an external company, differentiating the location of work execution from their actual employer. Within the tripartite relationship among the employer, temporary worker, and client company, the concept of assignment determines the responsibility and dynamics of the relationship, while German legislation maintains the stability of the employment relationship during personnel leasing [4].

The employment relationship between a temporary staffing agency and a temporary worker is based on the perceived concept of assignment, where the borrowing company holds legal responsibility as the employer, while the work is carried out at the user company's premises. The user company retains the right to guide the temporary worker during the assignment. Within the legal framework, the employment relationship remains unaffected, ensuring the same rights and protection as in a regular employment relationship [5].

Temporary employment offers flexibility to client companies as conventional commitments between them, and temporary workers are absent. Temporary workers provide a flexible labor force, while the client company maintains control during the leasing period. Although temporary employment is considered 'atypical,' temporary workers have the same rights and protections as regular employees [5,6].

Temporary employment is a subject of research, as the triangular structure among the employer, temporary worker, and client company creates

distinct labor and employer relationships. Despite being classified as 'non-standard,' temporary employment differs minimally from regular employment relationships, highlighting the significance of the assignment concept in regulating this dynamic relationship [7,8].

In the field of nursing, temporary employment is utilized to ensure continuous patient care within hospitals during periods of staff shortages. In such instances, there exist announced job vacancies that cannot be filled through regular hiring. Particularly in healthcare, temporary employment is less dependent on economic conditions [9].

Another characteristic in the field of nursing where temporary employment differs is the level of professional qualifications. The majority of temporarily employed individuals in Germany work in sectors with lower skill requirements. According to statistical data from the Federal Employment Agency, 31% have not completed any professional training. However, this pattern cannot be applied to the nursing sector [10].

In the nursing profession, temporary employment presents a unique profile in terms of qualifications. Unlike other sectors, statistical data indicate that a significant proportion of nurses engaged in temporary positions possess advanced professional qualifications and specialized training. This highlights the substantial emphasis placed on professional training within the nursing domain, a trend that differs from the general rates observed across other employment sectors [11,12].

The assessment of employees' emotional states arising from the execution of their job duties and the work environment stems from their perception of the work they offer. High professional satisfaction within the nursing environment constitutes a critical aspect for stabilizing professional groups, enhancing mutual satisfaction between nurses and patients. Simultaneously, it contributes to fostering harmonious relationships, making it crucial for ensuring high quality and effectiveness in healthcare services. [13].

The quality of nursing care is determined by the degree to which nursing services meet or surpass predefined standards and expectations, aiming for optimal outcomes for patients. This heavily depends on the capability of nursing staff to deliver safe, efficient, and personalized care. Essential factors include scientific expertise, patient-centered focus, utilization of evidence-based practices, safety protocols, effective communication, collaboration, and ongoing monitoring,

all crucial elements in attaining the mentioned objectives [14].

METHOD

A literature review was conducted, and searches for published research studies in databases were undertaken to locate relevant publications. Five methodological steps were employed to scope the field of application: identification of a research question, determination of relevant studies, study selection, data collection summarizing information, and synthesis of results.

The search process was delineated into two stages. Within the larger scope of research, an initial inquiry encompassed various forms of non-standard employment (e.g., temporary work, fixed-term contracts, part-time employment, self-employment, and multiple job roles). This process was subsequently reiterated to locate studies examining nurses' job satisfaction and the quality of nursing care provided.

The purpose of this literature review is to evaluate the use of temporary staffing as a flexible work model and its correlation with nurses' professional satisfaction and the quality of nursing care. The search was structured in two stages. Initially, a comprehensive investigation encompassed all forms of non-standard employment (e.g., temporary, part-time, self-employment) conducted within a larger research framework. This process was then replicated specifically to locate studies analyzing nurses' job satisfaction and the quality of nursing care. The search terms were consistently applied across the scientific databases Pubmed and SpringerLink, with data collected until November 2023. Additionally, manual searches were performed within the bibliographies of relevant articles and books.

The search terms used were: 'nursing temporary staffing,' 'job satisfaction,' 'quality of nursing care.' There were no restrictions regarding publication date or language. To guide the scoping of this field, specific questions were identified:

- What level of scientific and professional training do nurses employed through temporary staffing in healthcare facilities possess?
- What factors are linked to the evolution of temporary staffing in nursing care?

After eliminating duplicate entries, the search yielded 151 references. Based on abstracts and full-text evaluation, 18 studies were selected that investigate the correlation between temporary staffing and job satisfaction, as well as temporary staffing and the quality of nursing care. Studies

that did not address pertinent outcomes or provided insufficient information were excluded. Furthermore, qualitative studies and those lacking adequate data were excluded.

DISCUSSION

The findings of this literature review are presented as follows:

The main thematic sections of the study concentrate on assessing temporary staffing as a flexible work model and its effects on nurses' professional satisfaction, along with the quality of nursing care provided. It elucidates aspects concerning the flexibility of the temporary staffing system and its influence on nurses' satisfaction within their professional settings. Additionally, it explores the correlation between temporary staffing and the quality of patient care. The analyses focus on the scientific evaluation of these aspects, emphasizing the importance of temporary staffing within nursing practice and patient care quality.

Rumb & Kardys aimed to illustrate the impact of population aging alongside increasing multimorbidity, presenting significant challenges to the nursing industry. Temporary employment is highlighted as a short-term solution, particularly during periods of intense staffing shortages, contributing to the maintenance of care provision capacity. However, despite these advantages, temporary employment in the nursing sector isn't always beneficial for employers, necessitating an examination of various implications, such as the quality of work among temporary employees. Especially within the context of the COVID-19 pandemic, short-term decisions have been made in favor of utilizing temporary staffing, emphasizing the mitigation of personnel shortages linked to the pandemic and the capability to offer comprehensive care to patients [15].

Bhattacharya & Ray, through their research, examine the connection between representation issues in temporary employment agencies and the cost of employing temporary workers. Their study findings imply that organizational decision-makers should take into account not only the short-term flexibility offered by employing workers through temporary contracts but also the long-term perspective of finding permanent staff. This approach has the potential to strengthen the effectiveness of the interaction between internal and external employee incentives [16].

The research conducted by Knutsen, Fangen & Žabko focuses on identifying the specific influences of language and nursing culture on the double scrutiny experienced by nurses employed through staffing agencies. Their study delves into the assessment of their competencies, integration into the work environment, and their responses to it. By selecting Norway as the research context, the study tackles the challenges posed by the Norwegian language for individuals not native to Scandinavia. The findings shed light on the fact that nurses from Latvia encounter a heightened level of double scrutiny from staffing agencies compared to their Swedish counterparts, encountering distinct challenges. Latvian nurses demonstrate higher adaptability and enjoy improved working conditions, enabling them to voice dissatisfaction with unfair treatment more readily. Those who choose to leave the staffing provider can secure alternative employment more easily. However, Latvian nurses appear more inclined to tolerate derogatory treatment and exhibit a form of 'accommodative acceptance.' This highlights a need for a more nuanced understanding of the impact of double scrutiny on employees through employers, considering the interplay of language and cultural differences [17].

Hermes and colleagues argue that the most dissatisfied group of workers were permanent employees with additional part-time work. The satisfaction criteria significantly differed between the two groups, as permanent employees sought consistency and stability, whereas temporary workers were interested in broader experiences. Widely reported problem areas included unreliable duty rosters and excessive workloads. The researchers propose specific measures to improve these aspects, aiming to increase employee satisfaction and reduce turnover from healthcare facilities to staffing agencies. Additionally, they suggest adopting scientifically substantiated approaches for evaluating employee satisfaction and enhancing working conditions. Employing advanced research methods can provide a more comprehensive understanding of the dynamic factors influencing employee satisfaction, thus laying the groundwork for more effective interventions and improvements [18].

The aim of the study conducted by Sasso and her colleagues was to delve into the factors affecting nurses' intention to leave their jobs and consequently move elsewhere. Findings revealed that due to job dissatisfaction, 35.5% of nurses intended to quit their current job, and among them,

33.1% planned to exit the nursing profession. Factors contributing to this intention included understaffing, emotional exhaustion, inadequate patient safety, non-nursing care provision, and being male. Conversely, factors that attracted nurses included a positive perception of the quality and safety of care, as well as involvement in fundamental nursing activities [19].

The research conducted by the Royal College of Nursing aims to highlight the motivations guiding nurses' choice to work through staffing agencies and examines their perspective on the position of workers within the context of agency employment. The study reveals a lack of respect towards temporary staff from permanent colleagues, with their abilities being implied as unreliable, and their motives predominantly interpreted as financial. In environments facing staffing shortages, there is a highlighted need for alternative solutions. Findings underscore that nurses prioritize flexibility as the main incentive for agency work. Adherence to high compliance standards by agencies is vital to ensure patient safety. Flexible staff immediately offer necessary skills, relieving the overloaded medical personnel. Additionally, there is an emphasized need to recognize flexible staff as a critical part of the staffing solution, promoting the view that they are a constructive element and not an additional burden. With dedication similar to permanent employees, flexible staff plays a pivotal role in providing care before handing over to the next shift. Free from bureaucratic constraints, they invest their time in patient care, self-finance their education, and maintain continuous professional development [20].

Knutsen's research examined how nurse mobility affects the relationships between healthcare institutions and temporary staffing agencies. Findings suggest this dynamic presents itself as a complex blend of collaboration and competition. Healthcare institutions' reliance on temporary staffing agencies raises concerns, reinforcing the need for strategies to address challenges such as cost, productivity, and quality within the realm of nursing care, within the framework of the welfare state. Simultaneously, some healthcare institutions attempt to tackle staffing shortages by hiring permanent nursing staff, considering this practice more effective compared to using temporary staff and collaborating with temporary staffing agencies. Nevertheless, the recognition of the importance of temporary work persists, suggesting the need for its use, perhaps as a supplementary source of labor. Overall, the research highlights the complexity of the dynamics

between healthcare institutions and temporary staffing agencies [21].

De Cuyper, Notelaers, and De Witte investigated the relationship between job insecurity and employability with job satisfaction and emotional organizational commitment across various employment categories: permanent, fixed-term contract, and temporary workers. Their hypotheses included (a) the impact of job insecurity on job satisfaction and emotional organizational commitment, varying in intensity across different employment types, and (b) the effect of employability on job satisfaction and emotional organizational commitment, with similar differentiations among the employment categories.

These hypotheses were examined using data from 329 permanent, 160 fixed-term contract, and 89 temporary workers across 23 Belgian organizations. Results indicate that job insecurity is negatively associated with satisfaction and emotional organizational commitment for permanent and temporary workers, with a weaker connection for those on fixed-term contracts. Employability is negatively linked to satisfaction for fixed-term contract and temporary workers, with a smaller effect on permanent employees. Different perceptions regarding the factors influencing stress and positive work relationships are evident among the three groups of workers [22].

The research conducted by Bae, Mark, & Fried aimed to explore the relationship between the use of temporary nurses and safety outcomes in nursing. Specifically, they investigated concerns related to needlestick injuries, exposure to bodily fluids, and back injuries, examining their impact on both nurses and patients at the unit level. The findings revealed that nurses working in units with higher levels (above 15%) of temporary staff had a greater likelihood of reporting back injuries compared to their counterparts in units without temporary staff. Additionally, an increased occurrence of patient falls was observed among nurses utilizing temporary staff compared to those who did not. The study also highlighted that nurses in units with moderate levels (5-15%) of temporary staffing reported fewer medication errors in comparison to those without temporary staff [23]. Bräutigam and colleagues concluded that temporary nursing employment differs from other sectors as it is typically used to sustain the labor force supply rather than addressing periodic workload increases. Demand focuses on specialized workers, with less demand for unskilled labor. The motivations of temporary workers are diverse, creating an atypical worker

profile. Their research highlighted that the quality of care in the nursing sector significantly depends on the presence of specialized personnel. Simultaneously, they observed that the central issue of staffing shortages and specialized workers is not effectively addressed through temporary employment [24].

Faller and her colleagues' research investigate employment conditions, the quality of nursing care as perceived by nurses, job satisfaction, and the intention of permanent staff to leave the nursing profession. The study's findings suggest that various aspects of the work environment influence work approaches, perceptions of care quality in hospital settings, and employee satisfaction levels. The study underscores the significance of workplace factors in how nurses perceive care and their satisfaction levels. The results indicate that cultivating a positive work environment correlates with improved performance and more satisfactory work experiences. Ultimately, the research highlights the importance of ongoing monitoring and enhancement of working conditions to ensure high-quality care and staff satisfaction [25].

Kohrs' research concluded that external personnel were expected to have a high level of education, enabling nursing staff to appear professional and take on independent responsibilities within the defined space. Furthermore, it was confirmed that the use of nurses under a temporary employment arrangement entails nearly double the cost compared to utilizing internal nursing staff. Moreover, in most cases, the use of temporary workers in the hospital does not have negative implications for the quality of nursing care provided and therefore does not affect patients' health status. On the contrary, it is used to address existing personnel shortages, resulting in increased costs for delivering the same service, as documented by interview data [26].

Schmied investigates the reasons why nurses opt for temporary employment and the impact of this change on their job satisfaction. The research sample consists of 356 nurses working in personnel service companies. The shortage of specialized staff exerts significant pressure in the nursing environment, creating a sense of dissatisfaction among nursing personnel. The findings of this study support the hypothesis that temporary employment plays a positive role in shaping improved working conditions. It is observed that temporary employees report higher levels of flexibility in their work and enhanced satisfaction regarding their employment conditions. Additionally, nursing staff expresses the desire for

greater recognition of their profession, especially in specialized fields. Notably, transitioning to temporary employment appears to have a positive impact on job satisfaction. Furthermore, almost half of the participants indicate a preference for a complete career change, favoring temporary employment over a permanent position in a healthcare unit [27].

Hu's research provides a detailed analysis of the motives guiding intensive care nurses, offering a comprehensive and multi-dimensional overview of the current situation in this professional sector. The choices regarding the adoption of temporary employment stem from carefully processed factors closely related to the working conditions and stress prevailing in the intensive care units of German hospitals. At the core of these factors lie proper staff organization, fair compensation, the right to participate in scheduling and planning work hours, and the flexibility offered by temporary employment. Specifically, the findings underscore that temporary employment effectively addresses the heightened demands of the work environment, making it particularly appealing for intensive care nurses. Recognizing the importance of effective staffing, fair compensation, and the opportunity for active participation in shaping work schedules emerges as pivotal factors contributing to retaining personnel in temporary positions [28].

Aloisio and colleagues conducted research focused on factors associated with nurses' professional satisfaction, examining a sample of 334 nurses. The study's findings reveal that both individual factors related to healthcare professionals and organizational factors emerge as predictive indicators of their work satisfaction within healthcare structures. In contrast to demographic and structural characteristics of the work environment, the identified factors significantly influencing healthcare professionals' satisfaction in this study exhibit potential flexibility for interventions. Individual factors of a professional nature, such as professional experience and education, appear as significant predictors of their satisfaction. Furthermore, factors related to organizational structure, such as the degree of decision-making involvement and support from administrative bodies, also exhibit substantial influence on the work satisfaction of healthcare professionals. The findings of this study suggest that intervening in these influential factors may play a crucial role in promoting the work satisfaction of healthcare professionals. Effectively implementing interventions in these factors enhances both the well-being of

employees and the functioning of healthcare facilities [29].

In their study, Riedlinger and their collaborators examine negotiations related to temporary employment within the healthcare sector, specifically in nursing, shedding light on different dynamics compared to other industries. This research necessitates a sociological approach to comprehend the nuances of this process, while highlighting contradictions that contribute to the dialogue surrounding workforce leasing in nursing care. Within the nursing field, temporary employment emerges as a strategic means for nurses to disengage from the organizational environment, indirectly critiquing the prevailing work conditions. Employees are able to negotiate individual terms that would be unattainable under regular employment circumstances. Employment offered through leasing arrangements may be viewed as a form of resistance or an opportunity for self-limitation, addressing the collective pressure arising from the detachment and commercialization of work [30].

Oliveira, Gehri & Simon conducted a study to investigate potential associations between the frequency of temporary nurse utilization and permanently employed nurses, encompassing staffing levels within Swiss psychiatric hospitals. The findings revealed that approximately a quarter of the units surveyed reported frequent use of temporary nurses. Nevertheless, no statistically significant disparities were noted in the staffing levels of nurses. Slightly higher levels of intent to depart from the profession and feelings of burnout were observed among nurses in units where temporary nurses were frequently employed, compared to their permanently employed counterparts. The study's outcomes suggest plausible interactive dynamics between the use of temporary nurses, nurses' professional experience, and its impact on the quality of healthcare delivered within psychiatric facilities [31].

Maghsoud and his collaborators explored the mediating role of unspoken distribution of nursing care, job satisfaction, and emotional exhaustion in the relationship between workload and the quality of nursing care. In this contemporaneous study, 311 nurses from four distinct hospitals in central Iran were enrolled. The results illuminated that workload affects the quality of delivered nursing care by influencing the silent distribution of nursing care, job satisfaction, and emotional exhaustion [32]. Temporary employment, particularly through lease agreements, seems to underscore the insufficient acknowledgment of nurses' needs.

Addressing this situation is imperative to curb the ongoing trend of workforce migration from hospital settings, prioritizing the critical concerns of healthcare professionals.

Although temporary employment contributes to maintaining skills and care quality, it's observed as an inadequate long-term solution due to economic uncertainty in addressing staffing shortages. Therefore, there's a need for systematic research and addressing of the underlying causes driving the reliance on temporary employment. Exploring the reinforcement of structural training and professional development programs for nurses could offer sustainable solutions to better address their needs. An exploration into bolstering structured training and professional development programs for nurses stands to offer sustainable solutions in meeting their needs more effectively. In a scholarly context, examining the collective influence of temporary employment on nurses' satisfaction, with a specific emphasis on care quality, remains an open research field. The suggestion is to employ advanced methodologies such as quantitative and qualitative studies for comprehensive data collection and analysis.

To prevent negative repercussions of temporary employment on the working conditions of permanent staff, the implementation of well-defined temporary work sectors along with adequate resources during training is necessary. This guarantees the quality of staff preparation. Moreover, integrating group-based procedures is fundamental to managing increased workloads. The application of such procedures can ameliorate working conditions and mitigate the effects of temporary employment on permanent staff.

Nevertheless, it's imperative to examine solutions that diminish discrepancies among various employment structures and foster collective representation. The establishment of frameworks that advocate for sustainable working conditions in the nursing sector is of utmost priority.

Ultimately, scientific research employing advanced methodologies like quantitative and qualitative studies unveils the dynamic aspects affecting employee satisfaction. This forms the basis for consistent interventions that, upon implementation, can drive improvements in the work environment and bolster personnel contentment. The application of these measures is anticipated to yield benefits for both employees and the broader healthcare domain. Continual monitoring and assessment of outcomes constitute fundamental processes to ensure a continuous enhancement of working conditions.

By connecting scientific findings with practical decisions and policies, the proposal is to achieve a balanced framework among various forms of employment within the healthcare sector.

In summary, scientific research utilizing advanced methodologies, including quantitative and qualitative studies, reveals the dynamic facets affecting employee satisfaction. This serves as the theoretical basis for systematic interventions that, if applied, are anticipated to generate substantial improvements in the work environment and enhance personnel satisfaction. The implementation of these measures is estimated to offer benefits to both employees and the healthcare sector at large.

CONCLUSION

Conclusively, temporary employment within the nursing field, although instrumental in sustaining sufficient staffing levels within healthcare units, raises substantial concerns regarding working conditions and care quality. This assessment emphasizes the necessity for further research to comprehensively grasp the impact of temporary employment on nursing practices.

Conflicts of Interest: The authors declare no conflicts of interest.

REFERENCES

1. Riedlinger, I., Fischer, G. & Höss, T.: Pflegeberufe und Arbeits-kampf – ein Widerspruch? [Nursing professions and labor disputes - a contradiction?] In I. Artus & A. Henniger (Eds.), *Arbeitskonflikte und Gender* [Labor conflicts and gender]. Münster: Westfälisches Dampfboot: 214-228 (2020) <https://www.dampfboot-verlag.de/shop/artikel/arbeitskonflikte-sind-geschlechterkaempfe> [Google Scholar](#)
2. Vancea, M. & Utzet, M.: How unemployment and precarious employment affect the health of young people: A scoping study on social determinants. *Scandinavian Journal of Public Health*, 45: 73–84 (2016). <https://doi.org/10.1177/1403494816679555> [PubMed](#), [Scopus](#), [Google Scholar](#)
3. West, M., Bailey, S., & Williams, E.: *The courage of compassion. Supporting Nurses and Midwives to Deliver High-Quality Care*, London: The King's Fund, London (2020). [View Full Text](#), [Google Scholar](#)
4. Allan, B. A., Autin, K. L., & Wilkins-Yel, K. G.: *Precarious work in the 21st century: A psychological*

- perspective. *Journal of Vocational Behavior*, 126, 103491(2021). <https://doi.org/10.1016/j.jvb.2020.103491>
[Scopus](#), [Google Scholar](#)
5. Schäfer, H.: Entwicklung der Zeitarbeit. In: M.-O. Schwaab & A. Durian (Eds.), *Zeitarbeit. Chancen – Erfahrungen – Herausforderungen* (2nd ed., pp. 3–14). Wiesbaden: Springer VS: 3-14 (2017)
6. Bosmans, K., De Cuyper, N., Hardonk, S., & Vanroelen, C.: Temporary agency workers as outsiders: An application of the established-outsider theory on social relations between temporary agency and permanent workers. *Society, Health and Vulnerability*, 6(1), 27848 (2015).
<https://doi.org/10.3402/vqi.v6.27848>
[Google Scholar](#)
7. Bouncken, R. B., Bornewasser, M., & Bellmann, L.: *Neue Herausforderungen in der Zeitarbeit*. München: Rainer Hampp Verlag (2013)
8. Buschmann, R., & Ulber, J.: *Arbeitszeitgesetz, Basiskommentar*. Frankfurt am Main. Bunt-Verlag (2015)
9. Chen, P. C., Wang, M. C., & Fang, S. C.: Does motivation matter? The influence of the agency perspective on temporary agency workers. *Employee Relations*, 39(4): 561-581 (2017).
<https://www.emerald.com/insight/content/doi/10.1108/ER-06-2016-0124/full/html>
[Google Scholar](#)
10. Schwaab, M. O.: *Zeitarbeit aus betrieblicher Perspektive. Zeitarbeit: Chancen-Erfahrungen-Herausforderungen: 55-66* (2017)
https://link.springer.com/chapter/10.1007/978-3-658-15686-2_4
[Google Scholar](#)
11. Karagiannidis, C., Kluge, S., Riessen, R., Krakau, M., Bein, T., & Janssen, U.: Auswirkungen des Pflegepersonalmangels auf die intensivmedizinische Versorgungskapazität in Deutschland [Effects of the nursing staff shortage on intensive care capacity in Germany]. *Medizinische Klinik – Intensivmedizin und Notfallmedizin*, 114: 327–333 (2019). <https://epub.uni-regensburg.de/48713/>
[Google Scholar](#)
12. George, S.: Wie wirkt sich Personalleasing auf die Pflegequalität aus?. *Pflegezeitschrift*, 73(1-2): 67-69 (2020).
<https://link.springer.com/article/10.1007/s41906-019-0226-9>
[Google Scholar](#)
13. Roth, G., Wendt, F., Nübling, M., & Janßen, C.: Arbeitszufriedenheit und Arbeitsbelastung bei Beschäftigten der Behindertenhilfe im Vergleich zu allen Arbeitsfeldern: Daten und Analysen mithilfe des Copenhagen Psychosocial Questionnaire (COPSOQ) unter besonderer Berücksichtigung organisatorischer Merkmale(2018).
<https://www.ssoar.info/ssoar/handle/document/57585>
[Google Scholar](#)
14. Amling, S., & Vogd, W. (Eds.): *Dokumentarische Organisationsforschung: Perspektiven der praxeologischen Wissenssoziologie*. Verlag Barbara Budrich (2017).
[View Full Text](#), [Google Scholar](#)
15. Rump, A., & Kardys, C.: Arbeitnehmerüberlassung (Zeitarbeit) in der Pflege—eine Bestandsaufnahme vor dem Hintergrund aktueller politischer und demografischer Entwicklungen. In *Pflegemanagement und Innovation in der Pflege: Wie sich Mensch und Maschine sinnvoll ergänzen*. Wiesbaden: Springer Fachmedien Wiesbaden: 3-11 (2022).
https://link.springer.com/chapter/10.1007/978-3-658-35631-6_1
[Google Scholar](#)
16. Bhattacharya, A., & Ray, T.: Precarious work, job stress, and health related quality of life. *American Journal of Industrial Medicine*, 64(4): 310-319 (2021).
<https://doi.org/10.1002/ajim.23223>
[PubMed](#), [Scopus](#), [Google Scholar](#)
17. Knutsen, H. M., Fangen, K., & Žabko, O.: Integration and exclusion at work: Latvian and Swedish agency nurses in Norway. *Journal of International Migration and Integration*, 21: 413-429 (2020).
<https://link.springer.com/article/10.1007/s12134-019-00660-5>
[Scopus](#), [Google Scholar](#)
18. Hermes, C., Blanck-Köster, K., Gaidys, U., Rost, E., & Petersen-Ewert, C.: Einfluss der Arbeitsbedingungen und des Gehalts auf die Leiharbeit für Intermediate-Care- und Intensivstationen. *Medizinische Klinik-Intensivmedizin und Notfallmedizin*, 118(3): 202-213 (2023). DOI: 10.1007/s00063-022-00929-1
[PubMed](#), [Scopus](#), [Google Scholar](#)
19. Sasso, L., Bagnasco, A., Catania, G., Zanini, M., Aleo, G., Watson, R., & RN4CAST@ IT Working Group.: Push and pull factors of nurses' intention to leave. *Journal of nursing management*, 27(5): 946-954 (2019). <https://doi.org/10.1111/ionm.12745>
[PubMed](#), [Scopus](#), [Google Scholar](#)
20. Royal College of Nursing and HCL Nursing: *Agency Nursing under the microscope: understanding flexibility in the NHS*. RCN Research Paper, September (2016)
<https://www.rcn.org.uk/professional-development/publications/pub-005801>
21. Knutsen, H. M.: Health institutions, temporary work agencies and the mobility power of nurses. *Nordic Journal of Working Life Studies*, 8(4): 25-44 (2018).
<https://www.duo.uio.no/handle/10852/68582>
[Google Scholar](#)

22. De Cuyper, N., Notelaers, G., & De Witte, H.: Job insecurity and employability in fixed-term contractors, agency workers, and permanent workers: associations with job satisfaction and affective organizational commitment. *Journal of occupational health psychology*, 14(2):193(2009).
<https://doi.org/10.1037/a0014603>
[Google Scholar](#)
23. Bae, S. H., Mark, B., & Fried, B.: Use of temporary nurses and nurse and patient safety outcomes in acute care hospital units. *Health care management review*, 35(4): 333-344 (2010).
[DOI 10.1097/hmr.0b013e3181dac01c](https://doi.org/10.1097/hmr.0b013e3181dac01c)
[PubMed](#), [Scopus](#), [Google Scholar](#)
24. Bräutigam, C., Dahlbeck, E., Enste, P., Evans, M., & Hilbert, J.: Flexibilisierung und Leiharbeit in der Pflege (Arbeitspapier Nr. 215). Düsseldorf: Hans-Böckler-Stiftung (2010).
<https://www.econstor.eu/handle/10419/116671>
[Google Scholar](#)
25. Faller, G.: Atypische Beschäftigung – ein Handlungsfeld für Prävention und Gesundheitsförderung bei der Arbeit. In *Public Health Forum*. Vol. 28, No. 2. De Gruyter: 117-120 (2020).
<https://www.degruyter.com/document/doi/10.1515/pubhef-2020-0006/html>
[Google Scholar](#)
26. Kohrs, J.: Zeitarbeit in der Pflege: Boom mit Riesen-Sprengstoff. *kma-Klinik Management aktuell*, 24.07/08: 30-35 (2019).
<https://www.thiemeconnect.com/products/ejournals/abstract/10.1055/s-0039-1694929>
[Google Scholar](#)
27. Schmied, A.: Weshalb sich Pflegekräfte für die Zeitarbeit entscheiden. Eine empirische Studie zu Motiven und Arbeitszufriedenheit. GRIN Verlag (2021)
[View Full Text](#), [Google Scholar](#)
28. Hu, M. K.: Zeitarbeit in der Pflege: Eine empirische Untersuchung der Beweggründe von intensivmedizinischen Pflegefachkräften für eine Beschäftigung in der Arbeitnehmerüberlassung. PhD Thesis. Hochschule für Angewandte Wissenschaften Hamburg (2022)
29. Aloisio, L.D., Gifford W.A., McGilton, K.S., Lalonde, M., Estabrooks C.A. & Squires, J.E.: Individual and organizational predictors of allied healthcare providers' job satisfaction in residential long-term care. *BMC health services research*, 18: 1-18 (2018). [DOI: 10.1186/s12913-018-3307-3](https://doi.org/10.1186/s12913-018-3307-3)
[PubMed](#), [Scopus](#), [Google Scholar](#)
30. Riedlinger, I., Fischer, G., Lämmel, N., & Höß, T.: "Leasing ist wie ein stummer Streik"-Zeitarbeit in der Pflege. *AIS-Studien*, 13(2): 142-157 (2020).
<https://www.ssoar.info/ssoar/handle/document/70996>
[Google Scholar](#)
31. Oliveira, L., Gehri, B., & Simon, M.: The deployment of temporary nurses and its association with permanently-employed nurses' outcomes in psychiatric hospitals: a secondary analysis. *PeerJ*, 11: e15300 (2023). [DOI: 10.7717/peerj.15300](https://doi.org/10.7717/peerj.15300)
[PubMed](#), [Scopus](#), [Google Scholar](#)
32. Maghsoud, F., Rezaei, M., Asgarian, F. S., & Rassouli, M.: Workload and quality of nursing care: the mediating role of implicit rationing of nursing care, job satisfaction and emotional exhaustion by using structural equations modeling approach. *BMC nursing*, 21(1): 273 (2022). [DOI: 10.1186/s12912-022-01055-1](https://doi.org/10.1186/s12912-022-01055-1)
[PubMed](#), [Scopus](#), [Google Scholar](#)