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Factors Affecting Job Satisfaction of Hospital's Health Personnels: A Scoping Review

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Abstract

Introduction: Medical personnel make a crucial contribution to the standard of healthcare provided to patients. The extent of work contentment among medical staff members will affect the quality of health services. This research aimed to identify the factors that affect job satisfaction of hospital's health personnels.

Methods: This scoping review used sources from ScienceDirect and Scopus databases. The keywords used for manuscript searching were: "factors" AND "job satisfaction" OR "job happiness" OR "career contentment" AND "medical staff" OR "medical professional" AND "hospital". The Inclusion criteria were: published in 2020-2024 range, English language, freely accessible.

Results: The total number of articles found which were matched with the criteria was 38 articles. The studies were conducted throughout the global during and after pandemics. The intrinsic factors of job satisfaction mentioned were about burn out, workload, psychosocial problems, and sense of achievement, while the extrinsic factor included working environment and condition, leadership style, income, teamwork and empowerment through training and education.

Conclusion: Factors affecting job satisfaction in medical personnel included intrinsic factors of workload, psychosocial problems, discomfort, demands and sense of achievement and extrinsic factors of work environment, working conditions, leadership style, salary, teamwork, interpersonal relationships and employee empowerment.

Keywords: factor; job satisfaction; medical personnel; hospital;

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Introduction

According to Law No. 36 of 2014, healthcare workers are individuals who dedicate themselves to the healthcare field and possess professional behavior,

knowledge, and skills gained through medical or dental education, and who have the necessary authority to perform healthcare tasks. ¹ In their practice, medical personnel are tasked with providing health

services, diagnosing, and treating patients. To practice, medical personnel are required to have an STR issued by the Minister of Health in accordance with Law No. 17 of 2023 concerning health. ² Therefore, it is important for medical personnel to have adequate competences in order to carry out their duties in accordance with the authorized provisions. Medical personnel have responsibility in guaranteeing the quality of services provided to a patient. As professionals, they are expected to be able to carry out their roles and functions optimally in responding to demands coming from patients, patient's families, and coworkers. The extent of job satisfaction of medical staff will influence their performance, thereby indirectly affecting the quality of service provided. 3 The feeling conditions of medical personnel, both positive and negative conditions such as satisfaction or fatigue, affect the quality of service provided. The level of job satisfaction of medical personnel is an investment in medical personnel and is a major element in strategic management. Thus, fulfilling employee needs is believed to be able to encourage sustainable improvement in service performance.4 Human resources are a crucial element in the delivery of healthcare. The existence of turnover in medical personnel will have an impact such as the loss of quality human resources, recruitment costs, and training costs. ⁵ The high turnover intention can be increasing suppressed by employee commitment to the organization, also known as employee engagement.⁶ Based on research conducted in New York Hospitals, it shows that staff involvement affects work contentment and the intention to leave. 7 Job satisfaction is an important aspect that needs to be instilled in every medical professional. This is because medical personnel who have a strong attachment to the workplace will show a high level of engagement. The level of attachment plays an important role in encouraging medical personnel to provide

optimal health services and reduce their desire for turnover intention.⁸ Job satisfaction for medical personnel needs to be considered because it supports the quality of medical services for patients. Service quality is related to the satisfaction of its human resources, including medical personnel. Therefore, the aim of this research was to ascertain the determinants that can affect work contentment in medical personnel.

Methods

The approach employed in this research was a scoping review utilizing the PRISMA technique, which is implemented systematically by adhering to proper and structured protocols and stages. The research instruments included mobile phones, laptops, and internet connectivity. These tools facilitated the search for literature derived from research journals aligned with the study topic. The literature search was conducted online, drawing from ScienceDirect and Scopus databases. using keywords of factors AND job satisfaction OR job happiness OR career contentment AND medical staff OR medical personnel OR medical professional AND hospital. The search was refined by limiting articles to those published in the last 5 years (2020-2024), in English, original articles, full-text, and open access. The article selection was guided by the research objectives, focusing on studies addressing factors influencing job satisfaction in medical personnel. The review encompassed articles with either quantitative or qualitative designs and was not restricted to specific regions or countries. Of the 127.146 articles initially identified, 127.108 were excluded for failing to meet the inclusion criteria, such as publication date, originality, language, accessibility, or relevance during critical review. Ultimately, 38 articles meeting the inclusion criteria were analysed to extract data on factors impacting job satisfaction among medical personnel.

Identification of new studies via databases and registers Records identified from: Records removed before screening: Identification Records marked as ineligible by automation Databases ScienceDirect and Scopus tools [year 2020-2024] (n = 91.048) Keyword : factors AND job satisfaction OR Record removed for other reasons [article job happiness OR career contentment AND medical staff OR medical personnel OR type] (n= 5.825) medical professional AND hospital. (n = 127.146)Records excluded: Articles that are not on the topic (n = 26.864)Records screened Articles not in english language (n = 10) (n = 30.273)Articles that are not available in open access (n = 2087)Reports sought for retrieval Reports not retrieved Screening (n = 1.312)Not relevant to keyword (n = 1274) Reports assessed for eligibility Reports excluded: (n = 38)(n = 0)Reports of new included studies Included (n = 38)

Figure 1. PRISMA analysis report

Results

Table 1 shows the results of the included studies. In the results column, the

factors of job satisfaction were mentioned, included the external and internal factors.

Table 1. Results of studies

No	Author/Year le	/Titt	Database Source	Location	Method	Results
1	Bradley Hammond Braund (2024) ⁹	F, M, R	Scopus	New Zealand	cross-sectional surveys, with 418 subjects	A significant majority (89%) reported that a typical workday was at least somewhat stressful, while 79% expressed experiencing burnout. External stresses: adverse patient interactions, staff shortages. Internal stressor: the apprehension of making errors and the transition from university to professional life.

No	Author/Year/T ittle	Databas e Source	Location	Method	Results
2	Islam M, Bagnulo S, Wang Y et all (2023) ¹⁰	Scopus	Australia	cross-sectional surveys	The research revealed that 92.2% of healthcare providers expressed satisfaction with their participation in delivering community health services during the COVID-19 epidemic. Increase satisfaction factors: effective interaction with local healthcare providers, the utilization of telehealth in collaboration with face-to-face care, and elevated self-assessed capability.
3	Zhang Y, Xu Q, Ma J et all (2024) ¹¹	Scopus	China	cross-sectional survey, with 479 participants	82% stated experiencing pandemic weariness, 82% expressed job satisfaction, and 90.4% recognized their sense of employment value. Sleep quality, working when febrile, financial support for combating COVID-19, and acknowledgment of professional worth were substantially connected with pandemic weariness.
4	Peng S, Zhang J, Liu X et all 2023 ¹²	Scopus	China	cross-sectional study	Physical health factors, working environments, mental health effects of a pandemic, compensation, and relationship status all influence job burnout in healthcare professionals.
5	Lee J, Jang S, Kim N 2023 ¹³	Scopus	South Korea	cross-sectional survey	Personal characteristics (e.g., age, gender, and self-assessed health) and occupational elements (e.g., nature of job responsibilities and experiences of COVID-19-related bias) influenced burnout in healthcare professionals. Organizational support, encompassing emotional assistance and adequate financial remuneration, correlated with reduced burnout.
6	Chen W, Xu W, Chen Y et all 2024 ¹⁴	Scopus	China	a mixed-method quantitative survey and qualitative interviews	Social interactions received the greatest job satisfaction score, whereas working circumstances received the lowest score. Marital status, only child status and job return satisfaction exhibited significantly associated with turnover. Univariate studies indicated that Income significantly affected turnover, but this association diminished in multivariable analyses; nonetheless, it was considered crucial in the qualitative investigation. The qualitative investigation discovered that factors such as the work environment, effort-reward disparity, professional proficiency, and the availability of training and advancement opportunities influenced turnover.

No	Author/Year/T ittle	Databas e Source	Location	Method	Results
7	Moscu C, Marina V, Anghele A at al 2023 ¹⁵	Scopus	Romania	cross-sectional descriptive study	30.2% of emergency medical personnel are at significant risk of burnout. Workload, interpersonal relationships, and rewards inversely relate to emotional tiredness. Emotional weariness directly results from work experience. Participants exhibited ambivalence and discontent over the work atmosphere, however claimed happiness regarding the nature of their employment. Jobrelated elements, including social support and feedback, as major factors influencing employee well-being and mitigators of burnout risk. Emotional tiredness showed a negative correlation with job satisfaction, whereas personal success demonstrated a positive correlation with job satisfaction. Depersonalization is correlated with job dissatisfaction regarding the working environment and colleagues. Disparities in burnout and associated variables among healthcare professions, with resident physicians indicating elevated levels of personal accomplishment and paramedics exhibiting comparatively low levels of emotional tiredness.
8	De Mesa R, Marfori J, Fabian et all 2023 ¹⁶	Scopus	Philippines .	cross-sectional study	The effect of enhancing primary care on health workforce contentment and turnover intention varied across urban, rural, and remote settings. Although certain interventions, including improving compensation, showed promise in better-supported settings, the immediate effect of these interventions was insufficient in addressing the infrastructural and staffing gaps faced in underprivileged areas.
9	Kang J, Lee Y 2022 ¹⁷	Scopus	South Korea	cross-sectional study	The quality of sleep and presenteeism substantially influenced turnover risk. For clinical nurses with less than three years of experience, the quality of sleep markedly affected the turnover risk. In clinical nurses with more than six years of experience, presenteeism notably influenced turnover risk.
10	Khan S, Ntatamala I, Baatjies R et all 2024 ¹⁸	Scopus	South Africa	cross-sectional study	During the COVID-19 epidemic, job- related stressors significantly correlated with an elevated incidence of burnout among South African medical professionals employed in public hospitals.
11	Kgatle M, George J, Dominic F et all 2024 ¹⁹	Scopus	South Africa	cross-sectional study, with 101 participant	95% experienced burnout. Factors significantly associated with burnout included insufficient available resources and inadequate relationships with support from senior staff.

No	Author/Year/T ittle	Databas e Source	Location	Method	Results
12	Tekle M, Wolde H, Medhin G et all 2022 ²⁰	Scopus	Ethiopia	mixed methods (quantitative and qualitative)	The intention to leave was at 39.5%, with key reasons including insufficient incentives, lack of career growth opportunities (50.8%), excessive workload (24.2%), and other psychosocial problems (25%). Despite the staff turnover rate not being alarmingly high, there was a significant intention to depart, suggesting a discontented workforce.
13	Azmi M, Daud A, Shafei M et all 2022 ²¹	Scopus	Malaysia	cross-sectional study	Younger age was one of the most significant characteristics associated with job discontent, and dissatisfaction with annual performance marks was another significant factor.
14	Mozolova V, Tupa M 2024 ²²	Scopus	Slovakia	cross-sectional study	Material and spatial security, communication and relationships with colleagues, work organization, personnel shortages, bureaucracy, the prestige of the medical profession, and the present circumstances in Slovakia influence the conditions of their work and satisfaction.
15	Sa H, Nhiem N, Anh B et all 2024 ²³	Scopus	Vietnam	cross-sectional study	43.1% of poor total job satisfaction rate. Nonetheless, healthcare professionals indicated elevated job satisfaction levels in several areas, including personal empathy, discipline and reward, collaboration with colleagues, training and advancement opportunities, working environment, and compensation and benefits. Analysis of subgroups indicated notable statistical differences in job satisfaction (p < 0.01) associated with age (31 to 40 years) and employment position, with odds ratios of 3.9 and 8.6, respectively.
16	Bonsaksen T, Horghagen S, Arntzen C et all 2023 ²⁴	Scopus	Norway	cross-sectional study	The research indicates that job satisfaction within the field of occupational therapy correlates positively as years of experience increase and the capacity to interact with and impact the broader work environment. Therefore, to enhance job satisfaction, occupational therapists ought to strive to connect not just with their immediate tasks but also with the overarching objectives and strategies of their business.
17	Shah T, Parray Z, Islam S 2023 ²⁵	Scopus	India	Quantitative and qualitative research	This study enhances the understanding of self-determination theory by suggesting and empirically examining psychological capital as a mechanism via which transformational leadership influences job attitudes, specifically job satisfaction and organizational commitment.

No	Author/Year/T ittle	Databas e Source	Location	Method	Results
18	Makholwa N, Tlou B, Dlungwane T 2023 ²⁶	Scopus	South Africa	cross-sectional study	A majority of respondents (59%) indicated a minimal degree of overall job contentment. The respondents expressed dissatisfaction over the lack of recognition for their professional contributions (61.3%) and the absence of consideration for career advancement (74.3%). Moreover, insufficient cash compensation (87.2%) and perks (71.3%) were associated with diminished job satisfaction.
19	Palathoti S, Falqi T, Otitolaiye V 2024 ²⁷	Scopus	Oman	Quantitative design	Healthcare workers within the chosen healthcare facility reported high levels of workplace stress, due to a number of factors, such as staff shortages, work duration and workload, and the conditions of staff employment.
20	Hien P 2023 ²⁸	Scopus	Southern Vietnam	Quantitative design	Empowering leadership directly enhances the loyalty of medical staff to the organization and positively affects intermediary elements, including employee trust and work happiness. Moreover, employee trust and work satisfaction have a positive influence on organizational loyalty.
21	Wolde H, Tekle M, Alemayehu Y et all 2023 ²⁹	Scopus	Ethiopia	mixed method study	Despite the relatively low size of attrition, significant geographical heterogeneity and incremental patterns were observed. Furthermore, the impact of attrition extends beyond the healthcare sector. A critical analysis of the policy framework could enhance the deployment, thereby alleviating workload and enhancing incentives, such as career advancement. This could potentially lead to heightened job satisfaction and potentially mitigate attrition from the health sector.
22	Mateo Rodriguez I, KNox E, Oliver Hernandez C et all 2023 ³⁰	Scopus	Spain	mixed method study	This study evaluated the measurement characteristics of a single-item burnout measure (SIB) among 675 healthcare providers across five centers in Spain, using the short burnout questionnaire (BBQ) as the primary comparative instrument. The predictive validity was satisfactory, exhibiting strong positive relationships among SIB, overall BBQ, and the three categories of BBQ. Confirmatory factor analysis assessed the construct validity, demonstrating that the SIB adequately encompassed the elements of the three burnout factors delineated by the BBQ as well as the components of the three dimensions of the burnout syndrome factor.

No	Author/Year/T ittle	Databas e Source	Location	Method	Results
23	Li M, Yang Y, Zhang L et all 2024 ³¹	Science Direct	China	cross-sectional study	Multiple linear regression study indicated that experience in frontline work and negative views regarding COVID-19 had a positive correlation with mental health issues and an adverse correlation with both job satisfaction and quality of life.
24	Kader N, Elhusein B, Elhassan N et all 202 ³²	Science Direct	Qatar	cross-sectional survey	One-third of psychiatrists indicated significant emotional tiredness, while a comparable percentage reported diminished personal accomplishment. Fewer than 20% exhibited elevated degrees of depersonalization. Trainees experienced greater burnout than veteran psychiatrists. The sole criterion with which the majority of psychiatrists expressed dissatisfaction was opportunities for promotion.
25	Al Rawi N, Uthman A, Saeed M et all 2022 ³³	Science Direct	Iraq	cross-sectional survey	During the epidemic, dentists experienced widespread stress, depression, and anxiety. Many characteristics, including marital status, gender, years of clinical experience, and job satisfaction levels, all of which affected these psychological factors.
26	Meilianti S, Matuluko A, Ibrahim N et all 2022 ³⁴	Science Direct	worldwide	cross-sectional survey	A negative correlation exists regarding career expectations and both work satisfaction and career contentment scores. The employment environment is associated with educational and training possibilities, reduced reported workloads, increased autonomy, and higher compensation.
27	Xu S, Tao L, Haung H et all 2020 ³⁵		China	cross-sectional survey	Factors influencing intention to leave the job included job position, skill proficiency, vocation, and job happiness. Dissatisfaction with work regarding management practices, workload, colleague interactions, the nature of the work, and compensation as well as benefits was inversely correlated with intention to leave the job. Vocation emerged as the predominant factor affecting intention to quit, with a diminished sense of vocation potentially increasing the chance of a strong desire to leave the job by over tenfold, after adjusting for job satisfaction. Job satisfaction might somewhat moderate the relationship between vocation and intention to leave the job.
28	Fadare O, Witry M, Gaither C et all 2023 ³⁶		United States	cross-sectional study	Personal and workplace characteristics had different levels of importance in how satisfied pharmacists were with their jobs depending on their age, gender, and work setting.

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No	Author/Year/T ittle	Databas e Source	Location	Method	Results
29	Wangler S, Simon A, Meyer G et all 2023 ³⁷	Science Direct	Germany	cross-sectional study	A statistically significant increase in global job satisfaction and team support satisfaction among midwives in the Be-Up room.
30	Alvarez Peregrina C, Garcia de la Noceda A, Martinez-Perez C et all 2024 ³⁸	Science Direct	Portugal	cross-sectional study	Work satisfaction levels were superior in Portugal compared to Spain. The primary determinants of job satisfaction were remuneration, employment security, and collegial support.
31	Naito M, Suzuki N, Shimazu A et all 2022 ³⁹		Japan	Quantitative study	Enhanced education in oral medicine may yield further advantages for future job satisfaction.
32	Radwan R. Bentley J, Patterson J et all 2022 ⁴⁰	Science Direct	United states	cross-sectional study	Pharmacy professionals employed at chain community pharmacies expressed diminished contentment compared to those in alternative settings. Female, elevated annual salary, and reduced working hours were correlated with enhanced work satisfaction.
33	Chireh B, Essien S, Novik N et all 2023 ⁴¹		Canada	Comparative study	Work-related stress was a greater driver than the length of working hours; nonetheless, dissatisfaction with work, a history of mental health issues, divorce, and multiple chronic conditions were strong predictors of mental health disorders in both groups. Additionally, gender-specific variations existed in the occurrence and determinants of mental health issues over time.
34	Sadeghpour M, Sung S, Jacobe H et all 2020 ⁴²		United states	Cross-sectional study	Academic leaders compared to non-leaders reported more job satisfaction and showed a stronger inclination to remain within academia. Nonetheless, gender imbalances in leadership roles within academic dermatology remain, with males surpassing women in leadership positions. Male academic leaders report greater satisfaction levels than their female counterparts and perceive fewer challenges in balancing personal and professional lives.
35	Lee C, Park S 2021 ⁴³	Science Direct	Korea	Qualitative study	The elements influencing contentment with working conditions have evolved over time. Identifying elements that influence working conditions is essential to ensure the health and productivity of employees.

No	Author/Year/T ittle	Databas e Source	Location	Method	Results
36	Gomez-Polo C, Casado A, Montero J 2022 ⁴⁴	Science Direct	Spain	cross-sectional study	In the population under study, factors such as environment, age, and weekly working hours notably impact emotional exhaustion, while factors such as practice ownership, length of experience, and weekly working hours notably influence depersonalization (DP). Solitary work significantly increases the likelihood of experiencing a diminished sense of Personal Accomplishment (PA).
37	Kato Y, Sekiya T, Ishii R et all 2024 ⁴⁵	Science Direct	Japan	Quantitative study	Enhancing the quality of work life (QWL), particularly regarding "mental and physical effects on work" and "pride in work," may enhance the services provided by community pharmacists.
38	Heidari S, Parizad N, Goli R et all 2022 ⁴⁶	Science Direct	Iran	Descriptive correlational study. Quantitative	75.7% of nurses experienced dissatisfaction with their jobs, 40.6% exhibited severe emotional exhaustion (EE), 41.8% showed moderate EE, and 50.2% reported high levels of depersonalization (DP). Given that a majority of nurses indicated diminished job satisfaction and elevated burnout levels, nurse supervisors ought to implement suitable interventions to address these issues. These indicators could enhance patient happiness and, ultimately, the efficacy of the healthcare system.

Discussion

The findings from the literature study medical indicate that each paramedical staff member has at least several determinants that influence job satisfaction, resulting in turnover intention. Table 1 shows the determinants of job satisfaction among medical personnels. The determinants were divided into two categories: extrinsic factors and intrinsic factors, in accordance with Herzberg's theory. The results of the grouping of factors affecting job satisfaction among medical personnel are presented in Table 2.

Intrinsic Factors

Intrinsic elements influence the extent of job satisfaction through the internal drive of employees, fostering greater effort and performance. The Canadian Community Health Survey indicated that healthcare workers are

among those who experience high levels of job stress, with a heavy workload contributing to dissatisfaction in healthcare workers. 47 Research also revealed the need for action to boost motivation among healthcare professionals to ensure optimal healthcare service quality.48 The link between stress and job contentment holds significant meaning, with work discomfort and educational misalignment causing dissatisfaction and contributing to stress.⁴⁸ In Iran, hospital nurses' job stress was reported to result in medical incidents and affect job satisfaction, leading to high low retention. turnover rates. diminished job performance.49 Throughout COVID-19 pandemic, healthcare professionals on the frontline are required to cope with new pressures, and working during this time can result in burnout, diminished productivity, and dissatisfaction with work.⁵⁰ The sense of accomplishment gained from work has a lasting positive

effect on job performance. As an example, a study of pharmacy professionals in Australia found that the need for achievement, together with additional intrinsic factors, plays a greater role in increasing job satisfaction than extrinsic factors, such as compensation and work environment factors.⁵¹

Extrinsic Factors

Extrinsic factors refer to aspects that come from outside the scope of work and influence employees' job satisfaction levels. These factors include external elements that affect employees' working conditions. According to Herzberg (2003), extrinsic factors include supervision, income, job security, work environment, external influences, peer relationships, and organizational policies.⁵² Factors that

influence iob satisfaction in medical personnel and are included in extrinsic factors include the work environment, leadership style, salary and incentives, teamwork and relationships between coworkers, and employee empowerment. Research in Africa indicated that low wages, inadequate training and professional development, less harmonious relationships with superiors, substandard working conditions, and unfair leadership styles were the main causes of job dissatisfaction among health workers.⁵³ such as demographic Factors characteristics such as gender, age, education level, job title, marital status, and working conditions, including salary and rotational work systems, also have a relationship with the level of job satisfaction.48,54

Table 2 . Grouping of Factors Affecting Job Satisfaction of Hospital's health Personnel

Intrinsic Factors	Extrinsic Factors		
Workload that causes burnout and	Working environment and working		
psychosocial problems	conditions in carrying out their work		
Discomfort with work causes stress	Leadership style		
Demands during the COVID-19 pandemic	Salary in terms of amount and intensive		
Sense of achievement gained from work	Teamwork, relationships with coworkers at		
Sense of achievement gained from work	work		
	Employee empowerment, education and		
	training		

Conclusion

The findings of this scoping review indicated that factors affecting job satisfaction in medical personnel included intrinsic factors of workload, psychosocial problems, discomfort, demands and sense of achievement and extrinsic factors of work environment, working conditions, leadership style, salary, teamwork, interpersonal relationships and employee empowerment.

Ethics approval

Not applicable

Availability of data and materials

Not applicable

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Author Contribution

TH writing and editing for the manuscript. SP and YD as supervisor writing for the manuscript.
All three authors contributed equally to writing this manuscript.

References

- 1. Indonesia. Undang-Undang Republik Indonesia Nomor 36 Tahun 2014 Tentang Kesehatan. (2014).
- 2. Indonesia. *Undang-Undang*Republik Indonesia Nomor 17 Tahun
 2023 Tentang Kesehatan. (2023).
- 3. Adamopoulos, I. P. & Syrou, N. F. Associations and Correlations of Job Stress, Job Satisfaction and Burn out in Public Health Sector. *Eur J*

- Environ Public Health 6, em0113 (2022).
- 4. Karimi, Z., Darban, F., Karimi, S. & Sfarzai, E. The effectiveness of communication skills training on performance professional quality of work life of pre-hospital medical emergency staff: experimental study in Iran. Internastional Emergency Nursing (2024).
- 5. Amah, O. & Oyetunde, K. The effect of servant leadership on employee turnover in SMEs in Nigeria: the role of career growth potential and employee voice. *Journal of Small Business and Enterprise Development* 27, (2020).
- 6. Memon, A. B. & Meyer, K. Affordances of Business Pages on Social Networking Sites: Towards an Integration Model. *International Journal Of Social Media and online Communities* 12, 21–41 (2020).
- 7. Edwards-Dandridge, Y., Simmons, B. D. & Campbell, D. G. Predictor of Turnover Intention of Register Nurses: Job Satisfaction or Work Engagement? International Journal of Applied Management and Technology 19, (2020).
- 8. Kurniawaty, Ramly, M. & Ramlawati. The Effect of Work Environment, Stress, and Job Satisfaction on Employee Turnover Intention. *Management Science Letters* (2019).
- 9. Bradley, F., Hammond, M. & Braund, R. Stress, burnout, and the need for support: a survey of early career pharmacists. *International Journal of Pharmacy Practice* 32, 91–96 (2024).
- Islam, M. I. et al. Job Satisfaction of Health Practitioners Providing Outreach Health Services during COVID-19 in Rural New South Wales (NSW) and the Australian Capital Territory (ACT), Australia. Healthcare (Switzerland) 11, (2023).
- Zhang, Y., Xu, Q., Ma, J., Wang, Z.
 Lu, S. Pandemic fatigue and clinical front-line medical staff health, job status during the COVID-19 pandemic: A cross-sectional survey

- after the lifting of epidemic restrictions. *Nurs Open* 11, (2024).
- 12. Peng, S. *et al.* Job burnout and its influencing factors in Chinese medical staffs under China's prevention and control strategy for the COVID-19 pandemic. *BMC Public Health* 23, (2023).
- 13. Lee, J., Jang, S. N. & Kim, N. S. Burnout Among Public Health Workers During the COVID-19 Pandemic in South Korea. *J Occup Environ Med* 65, E141–E146 (2023).
- Chen, W. et al. Job satisfaction and turnover of the first group of ruraloriented tuition-waived medical students in Guangxi, China: a mixedmethod study. BMC Primary Care 25, (2024).
- 15. Moscu, C. A. et al. The Impact of Work-Related Problems on Burnout Syndrome and Job Satisfaction Levels among Emergency Department Staff. Behavioral Sciences 13, (2023).
- 16. De Mesa, R. Y. H. et al. Experiences from the Philippine grassroots: impact of strengthening primary care systems on health worker satisfaction and intention to stay. BMC Health Serv Res 23, (2023).
- Kang, J. & Lee, Y. Health-Related Factors Influencing Nurse Turnover by Clinical Career: A Secondary Data Analysis of Clinical Nurses in South Korea. Int J Environ Res Public Health 19, (2022).
- Khan, S., Ntatamala, I., Baatjies, R.
 Adams, S. Prevalence and determinants of burnout among South African doctors during the COVID-19 pandemic. South African Journal of Psychiatry 30, (2024).
- Kgatle, M., George, J., Dominic, F. & De Jager, P. Prevalence and factors associated with burnout among junior medical doctors at a South African tertiary public sector hospital. Pan African Medical Journal 47, (2024).
- 20. Tekle, M. G. et al. Understanding the factors affecting attrition and intention to leave of health extension workers: a mixed methods study in

- Ethiopia. *Hum Resour Health* 20, (2022).
- 21. Azmi, M. I., Daud, A., Shafei, M. N. & Abdul Hamid, A. Job Dissatisfaction and Its Predictors among Healthcare Workers of 'Type 2 Health Clinics' in North-Eastern Malaysia. *Int J Environ Res Public Health* 19, (2022).
- Mozolová, V. & Tupá, M. Migration Intentions Of Nurses And Nursing Students From Slovakia: A Study On Drivers. Problems and Perspectives in Management 22, 534–548 (2024).
- 23. Sa, H. C., Nhiem, N. T. T., Anh, B. T. M. & Thanh, N. D. Job satisfaction of health workers at a Vietnamese University Hospital and its predicted factors: A cross-sectional study. *Health Sci Rep* 7, (2024).
- Bonsaksen, T., Horghagen, S., Arntzen, C., Gramstad, A. & Stigen, L. Job Satisfaction among Occupational Therapists Employed in Primary Care Services in Norway. *Int J Environ Res Public Health* 20, (2023).
- 25. Shah, T. A., Parray, Z. A. & Islam, S. ul. The empirical relationship between transformational leadership and job attitudes: mediating role of psychological capital a study of healthcare in India. *International Journal of Public Leadership* 19, 45–63 (2023).
- 26. Makholwa, N., Tlou, B. & Dlungwane, T. P. Job satisfaction among rehabilitation professionals employed in public health facilities in KwaZulu-Natal. *Afr Health Sci* 23, 764–772 (2023).
- 27. Sr, P., Al Falqi, T. & Vo, O. Study on causal effects of occupational stress on healthcare workers at a selected healthcare facility in Oman. *Int. J. Occup. Safety Health* 14, 98–106 (2024).
- 28. Hien, P. H. The mediating effects of employee trust and job satisfaction in the relationship between empowerment leadership and employee loyalty. *International Journal of Environment, Workplace and Employment* 1, (2023).

- 29. Wolde, H. M., Tekle, M. G., Alemayehu, Y. K., Gebre, E. G. & Teklu, A. M. Attrition of health extension workers in Ethiopia: trends, regional variations and determinants a mixed methods study of 15 years of experience. BMC Health Serv Res 23, (2023).
- Mateo-Rodríguez, I., Knox, E., Oliver-Hernandez, C. & Daponte-Codina, A. Validation of a Single-Item Screening Measure of Burnout in a Sample of Spanish Health Workers. Soc Sci 12, (2023).
- 31. Li, M. et al. Mental health, job satisfaction, and quality of life among psychiatric nurses in China during the COVID-19 pandemic: A cross-sectional study. Clin Epidemiol Glob Health 26, (2024).
- 32. Kader, N. et al. Burnout and job satisfaction among psychiatrists in the Mental Health Service, Hamad Medical Corporation, Qatar. Asian J Psychiatr 58, (2021).
- 33. Al-Rawi, N. H. *et al.* Depression, Anxiety and Stress Among Dentists During COVID-19 Lockdown. *Open Dent J* 16, (2022).
- 34. Meilianti, S., Matuluko, A., Ibrahim, N., Uzman, N. & Bates, I. A global study on job and career satisfaction of early-career pharmacists and pharmaceutical scientists. *Exploratory Research in Clinical and Social Pharmacy* 5, (2022).
- 35. Xu, S., Tao, L., Huang, H., Little, J. & Huang, L. Pediatric Nurses' Turnover Intention and Its Association with Calling in China's Tertiary Hospitals. *J Pediatr Nurs* 52, e51–e56 (2020).
- 36. Fadare, O. O., Witry, M. J., Gaither, C. A., Doucette, W. R. & Schommer, J. C. What drives job satisfaction among community pharmacists? An application of relative importance analysis. *Exploratory Research in Clinical and Social Pharmacy* 9, (2023).
- 37. Wangler, S., Simon, A., Meyer, G. & Ayerle, G. M. Influence of the birthing room design on midwiveś job satisfaction A cross-sectional online survey embedded in the 'Be-

- Up' study. Sexual and Reproductive Healthcare 37, (2023).
- 38. Alvarez-Peregrina, C., Garcia de la Noceda, A., Martinez-Perez, C. & Sánchez-Tena, M. Á. Job satisfaction of Spanish and Portuguese optometrists. *J Optom* 17, (2024).
- 39. Naito, M. *et al.* Job Satisfaction and Perceived Importance of Oral Medicine Amongst Dentists. *Int Dent J* 72, 154–160 (2022).
- Radwan, R. M., Bentley, J. P., Patterson, J. A., Dixon, D. L. & Salgado, T. M. Predictors of job satisfaction among pharmacists: A regional workforce survey. Exploratory Research in Clinical and Social Pharmacy 5, (2022).
- 41. Chireh, B., Essien, S. K., Novik, N. & Ankrah, M. Long working hours, perceived work stress, and common mental health conditions among full-time Canadian working population: A national comparative study. *J Affect Disord Rep* 12, (2023).
- 42. Sadeghpour, M., Sung, S. M., Jacobe, H. & Kimball, A. B. Career satisfaction of leaders in academic dermatology: Results from a national survey. *Int J Womens Dermatol* 6, 25–29 (2020).
- 43. Lee, C. & Park, S. Changing Factors of Employee Satisfaction with Working Conditions: An Analysis of the Korean Working Conditions Survey. Saf Health Work 12, 324–338 (2021).
- Gómez-Polo, C., Casado, A. M. M. & Montero, J. Burnout syndrome in dentists: Work-related factors. J Dent 121, (2022).
- 45. Kato, Y. et al. Quality of work life (QWL) of community pharmacists and its association with subjective evaluations of pharmaceutical services. Exploratory Research in Clinical and Social Pharmacy 14, (2024).
- 46. Heidari, S., Parizad, N., Goli, R., Mam-Qaderi, M. & Hassanpour, A. Job satisfaction and its relationship with burnout among nurses working

- in COVID-19 wards: A descriptive correlational study. *Annals of Medicine and Surgery* 82, (2022).
- 47. Gohar, B. & Nowrouzi-Kia, B. The Forgotten (Invisible) Healthcare Heroes: Experiences of Canadian Medical Laboratory Employees Working During the Pandemic. Front Psychiatry 13, (2022).
- 48. Alrawahi, S., Sellgren, S. F., Altouby, S., Alwahaibi, N. & Brommels, M. Stress and job satisfaction among medical laboratory professionals in Oman: A cross-sectional study. *Heliyon* 10, (2024).
- 49. Ebrahimi, M. H., Abbasi, M., Poursadeghiyan, M. & Mehri, A. Relationship Between Job Stress and Anxiety, Depression and Job Satisfaction in Nurses in Iran. *Medwell Journals* (2016).
- 50. Mahdavi, A., Atlasi, R., Ebrahimi, M., Azimian, E. & Naemi, R. Human resource management (HRM) strategies of medical staff during the COVID-19 pandemic. *Heliyon* 9, (2023).
- 51. Elshami, S. *et al.* Examining Pharmacy Alumni's Perceptions of Job Satisfaction, Achievements, and Preparedness: A Mixed-Methods Study. *Am J Pharm Educ* 87, (2023).
- 52. Wang, G. et al. The job burnout of tuberculosis healthcare workers and associated factors under integrated tuberculosis control model: a mixed-method study based on the two-factor theory. BMC Health Serv Res 24, (2024).
- 53. Abate, H. K. & Mekonnen, C. K. Job satisfaction and associated factors among health care professionals working in public health facilities in ethiopia: A systematic review. *J Multidiscip Healthc* 14, 821–830 (2021).
- 54. Yuguero, O., Shi, L., Raj Onta, S., Yang, F. & Jiang, N. Job satisfaction and its related factors among emergency department physicians in China. *Frontier in Public Health* (2022).