

THE INFLUENCE OF INTERNAL FACTORS ON JOB SATISFACTION IN HEALTHCARE SETTINGS

Pengaruh Faktor Internal Terhadap Kepuasan Kerja di Fasilitas Kesehatan

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Abstract

Background: Job dissatisfaction in healthcare facilities can increase medical errors. In order to reduce the medical errors, hospitals must focus on employee job satisfaction. In this case, both stress and burnout can lower job satisfaction.

Aims: This research was conducted to analyze the internal factors that affect the level of job satisfaction of employees in health facilities.

Methods: The method applied is the PRISMA framework, which consists of five stages, namely eligibility criteria, information sources, study selection, data collection process, and data items.

Results: Systematic review was done on 34 quantitative studies about the factors that influence job satisfaction. Based on the review, the internal factors known are demographic and personal factors. In this case, demographic factors mostly do not affect employee job satisfaction, one of which is salary. Meanwhile, the most researched personal factor and the biggest influence is burnout.

Conclusion: Based on the systematic review, it is known that the internal factors affecting employees' job satisfaction include demographic and personal factors. The demographic factor that has a significant effect is salary, while the most researched individual factor is burnout. Working in the health sector requires caution so as not to cause medical errors. Health workers who experience burnout are at risk of causing medical errors. For that we need a strategy to overcome burnout so as to increase job satisfaction.

Keywords: burnout, healthcare, internal factor, job satisfaction, PRISMA

Abstrak

Latar Belakang: Tingkat kepuasan kerja pegawai di fasilitas kesehatan yang rendah dapat meningkatkan risiko kesalahan medis. Untuk itu, fasilitas kesehatan perlu memperhatikan tingkat kepuasan kerja pegawainya sehingga dapat mengurangi risiko kesalahan medis. Faktor internal dapat menjadi pemicu rendahnya tingkat kepuasan kerja pegawai seperti stress dan burnout.

Tujuan: Menganalisis faktor-faktor internal yang mempengaruhi tingkat kepuasan kerja pegawai di fasilitas kesehatan.

Metode: Menggunakan kerangka PRISMA, yang terdiri dari lima tahapan yaitu eligibility criteria, information sources, study selection, data collection process, dan data items.

Hasil: Sistematis review berasal dari 34 jurnal kuantitatif tentang faktor yang mempengaruhi kepuasan kerja. Diketahui faktor internal yaitu faktor demografi dan personal. Faktor demografi sebagian besar tidak berpengaruh terhadap kepuasan kerja pegawai, salah satu yang berpengaruh adalah gaji. Faktor personal yang paling banyak diteliti dan pengaruhnya paling besar yaitu burnout.

Kesimpulan: Hasil tinjauan sistematis menunjukkan faktor internal meliputi faktor demografis dan personal. Faktor demografi yang berpengaruh signifikan adalah gaji. Faktor individu paling banyak diteliti adalah burnout. Bekerja di bidang kesehatan memerlukan kehati-hatian agar tidak menimbulkan kesalahan medis. Tenaga kesehatan yang mengalami burnout berisiko menyebabkan medical error. Untuk itu diperlukan strategi untuk mengatasi burnout sehingga dapat meningkatkan kepuasan kerja.

Kata kunci: burnout, faktor internal, fasilitas kesehatan, kepuasan kerja, PRISMA



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Introduction

An explanation of employees' response to business, work, and co-working-related psychological factors that produce joy, comfort, confidence, reward, personal progress, and numerous favorable opportunities is referred to as job satisfaction (Robbins, 2017; Elshoryi *et al.*, 2022). Employee happiness can be affected by various factors that differ from one person to another person (Temesgen *et al.*, 2018). When employees' needs and expectations are met, their job satisfaction rises. Employee happiness is essential for healthcare personnel (doctors, midwives, nurses, and other medical occupations) since their job requires them to treat patients, and job dissatisfaction can lead to medical mistakes and poor patient outcomes (Aloisio *et al.*, 2021). In this case, human resources affect healthcare services (Temesgen *et al.*, 2018). Employees report high levels of job satisfaction when they experience positive emotions in response to the many positive aspects of their work, workplace, and coworkers (Robbins, 2017; Elshoryi *et al.*, 2022). As a result, hospitals and other healthcare facilities must prioritize employee satisfaction.

Several factors affecting job satisfaction are individual, psychological, and environmental factors (Tarcán *et al.*, 2017). Population characteristics including age, educational status, relationship status, and gender are examples of individual factors. Yet, these demographic variables had no impact on hospital personnel's job satisfaction (Chamberlain *et al.*, 2016; Al-Haroon and Al-Qahtani, 2020). Furthermore, one of the psychological factors is burnout. Feeling exhausted is associated with medical errors, malpractice, substance use miscalculation, and suicidal ideation (Shakir *et al.*, 2018; Khalafallah *et al.*, 2020). In addition, low salaries, limited educational development opportunities, and inadequate facilities and equipment are also the primary reasons for employee dissatisfaction (Temesgen *et al.*, 2018), which are the examples of environmental factors. These matters

further increase employee stress levels (Klimo *et al.*, 2013).

Stress reduces compassion and job satisfaction (Alexandrova-Karamanova *et al.*, 2016; Park *et al.*, 2016; Karanikola *et al.*, 2020). Stressed workers struggle to control their emotions, which leads to that employees may be harmed. Hence, individual, psychological, and environmental factors may affect hospital employee job satisfaction. Since emotional, psychological, and environmental factors combine, stress and tiredness can impair job satisfaction. Nurses, doctors, and other medical personnel's satisfaction depends on many aspects, as explained above. Knowing healthcare worker satisfaction can help medical staff maintain and sustain internal elements. These qualities can help build work ethic and excitement. In addition, it also reduces labor fatigue, job dissatisfaction, and health issues. This disorder is risky for health workers who work closely with patients. Therefore, this systematic study investigated healthcare job satisfaction factors.

Method

PRISMA framework applied for this research, was made up of qualification, data sources, research decision, data gathering, and data items. The eligibility requirements are prestigious international journals published in the last five years and the factors of healthcare personnel job satisfaction. In this case, the articles were first screened using several criteria, regardless of hospital type (private or public), area, or country (both developing and developed countries).

Furthermore, ScienceDirect, Emerald, Growing Science, Sage journals, Taylor & Francis Online, and Wiley were used for the researchers to review healthcare job satisfaction articles. In this case, articles were selected using several terms, including "work satisfaction," "hospital job satisfaction," "determinant of hospital job satisfaction," "internal factor and hospital job satisfaction," "burnout and job satisfaction," and "stress and job satisfaction." This second stage was repeated until the titles, abstracts, and

keywords fit the criteria. After the articles had been selected, the researchers reviewed the articles' introduction, techniques, and conclusions, which was the third stage of this framework. In addition of this stage, the researcher also scanned the articles to match the bibliographies. These steps were further repeated to complete the article review.

In the fourth stage, data acquisition was carried out. This study collected the author, year of publication, journal name, objectives, theory, instruments, analytical methods, and research results.

Furthermore, the last stage is finalizing the data item. After data acquisition, the data were found heterogeneous. Hence, content analysis categorizes hospital employee job satisfaction aspects based on research findings on work happiness.

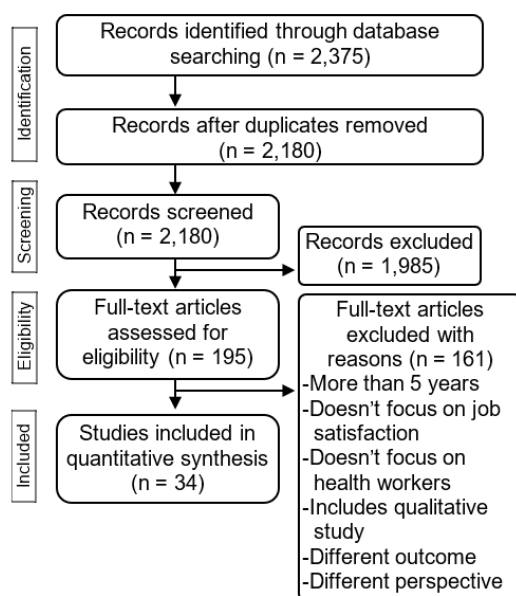


Figure 1. PRISMA Diagram

Result and Discussion

Characteristics of selected studies

Current researchers have studied job satisfaction in healthcare organizations, including its causes, dimensions, and effects. Hence, 2,375 publications have published research on healthcare work satisfaction as independent and dependent variables (Figure 1). Screening was then performed on the various existing

publications. This study aimed to identify characteristics that influence job satisfaction in hospital health facilities, so job satisfaction was designated as a dependent variable. In addition to articles that explore issues affecting job satisfaction, 1,985 articles were eliminated from the analysis. In this case, it was obtained that both internal and external factors affect job satisfaction. Background, methods, results, and conclusions show that this study examined internal factors that affect healthcare job satisfaction. After a thorough analysis, 161 publications were excluded from this study, leaving 34 articles.

These 34 studies were conducted between 2015 and 2022. Among them, studies that were conducted in 2019–2020 dominated the research, as many as seven studies. Meanwhile, six studies were published between 2018 and 2021. Furthermore, among the studies reviewed, it was found that job satisfaction in healthcare facilities was also investigated in the US, Ethiopia, India, China, Canada, and South Korea, each with two studies. One study each includes Turkey, Italy, Greece, Israel, Australia, Jordan, Malaysia, Colombia, Ghana, Tajikistan, Saudi Arabia, and Japan. Therefore, several countries have studied healthcare job satisfaction. This employee job satisfaction survey comprised nurses, doctors, pharmacists, nutritionists, laboratory employees, and others. Furthermore, the research sites involved are varied. Public hospitals and long-term healthcare centers dominated most of the research projects. However, private hospitals, clinics, university hospitals, and public hospitals also conducted study on their employee job satisfaction.

Measurement of job satisfaction

As many as 34 papers or articles employed various methodologies to gauge job satisfaction. Some question items refer to other people's research. Others used the American Society of Health-System Pharmacists (ASHP) questionnaire with 32 question items, the NHSS questionnaire created by the China's National Health and Family Planning Commission, the Chinese

translation of the Minnesota Satisfaction Questionnaire (MSQ) with 20 questions, and the Michigan Organizational Assessment Questionnaire with three question items (NHFP). In addition, many job satisfaction surveys include a Likert scale ranging from 1 to 3, 5, 6, 7, and sometimes up to 20 points (Table 1).

Determinants of job satisfaction

Health workers' job satisfaction was influenced by various internal factors of socio-demographic and personal characteristics (Table 2). Based on the demographic factors in Table 2, several factors had a positive, negative, or no effect on job satisfaction. The demographic factors that had no significant impact on job satisfaction include age, education level, gender, and duration of work. It is different from the variable of employees' earning. Previous study conducted by Manan *et al.* (2015), Tarcan *et al.* (2017), and Arkwright, Edgar and Debenham (2018) obtained that salary had a positive effect on job satisfaction. However, it contrasts to research conducted by Abdulloev (2018), Al-Haroon and Al-Qahtani (2020), and Alrawashdeh *et al.* (2021) that salary negatively affects employees' job satisfaction.

Furthermore, personal factors that can affect a person's job satisfaction are further listed in Table 2. Burnout became the factor most studied with seven studies. The other factors, such as compassion, empowerment, emotional labor, goal awareness, mental health status, recognition, and work engagement had two studies, while other variables only had one study. These findings suggest that burnout had a significant impact on healthcare workers' job satisfaction. Moreover, burnout itself had a significant positive and negative effects on employees' job satisfaction (Srivastava, Misra and Madan, 2019; Li and Xie, 2020; Vaillancourt and Wasylkiw, 2020; Alrawashdeh *et al.*, 2021; Negri *et al.*, 2021).

Internal factor on job satisfaction

According to the studies reviewed, burnout affects healthcare workers' job satisfaction most. This situation has more negative influence than positive influence.

Furthermore, according to Chamberlain *et al.* (2016), burnout predicts job satisfaction the highest. Cynicism, depersonalization, efficacy, emotional tiredness, and personal accomplishment are the aspects that cause burnout. In addition, burnout boosts job satisfaction and professional efficacy (Aloisio *et al.*, 2018). On the other hand, workers that do not experience burn out can complete tasks. Table 2 indicates not all burnout research affects job satisfaction, since few studies say it had no effect.

Health workers also work more during the COVID-19 pandemic. Mentally distressed healthcare professionals are more likely to contract COVID-19, and overwork exhausts them (Alrawashdeh *et al.*, 2021). Workload burnout may increase medical blunders. Medical errors harm patients. In addition, anxiety and grief can sometimes cause medical errors (Srivastava *et al.*, 2019).

Workloads and environments vary by job. Both can cause psychological burnout (McCormack *et al.*, 2018). Internal and external demands make nursing difficult. Therefore, health workers must reduce burnout to develop systems, create efficient work processes, achieve more reasonable workloads, and set work-life balance boundaries (Waddill-Goad, 2019). In addition, health practitioners must take care of themselves to treat patients without unnecessary errors.

Health workers-doctors, nurses, and others-need workshops to learn about burnout and how to prevent it (Alrawashdeh *et al.*, 2021). Burnout survivors learn coping strategies, resilience, and stress management. Training, workshops, and incentives should help healthcare workers overcome burnout and improve workplace satisfaction.

Burnout and other factors affect job happiness. While high salary can boost productivity. Due to personnel turnover, high-earners will hesitate to quit (Iqbal *et al.*, 2017). Manan *et al.* (2015), Tarcan (2017), Arkwright, Edgar and Debenham (2018), and Akuffo (2021) supported this statement that salary increases job happiness. Some research projects suggest that high incomes lower job satisfaction (Abdulloev, 2018; Al-Haroon and Al-Qahtani, 2020; Alrawashdeh *et al.*, 2021).

Table 1. Characteristic of Included Studies

No	Author(s), Year	Country	Aim	Theoretical Framework	Participants	Measurement/ Instrument	Analysis
1	Lee and Jang, 2020	Korea	To investigate the links between emotional labor, feelings, and job satisfaction	NA	168 full time nurses	Five-point Likert scale Emotional labor strategies scale Discrete Emotions (Achievement Emotions Questionnaire for Teachers and the Emotions in Teaching Inventory). Interprofessional collaborative competency (Chiba Interprofessional Competency of 29 Scale)	Structural Equation Modelling
2	Majima <i>et al.</i> , 2019	Japan	To better understand how interprofessional collaborative skill and other relevant criteria connect to work satisfaction	NA	913 nurses	Five-point Likert scale Job Satisfaction (The ASHP survey consisting of 32 question items) The intrinsic elements (employee perceptions of their work) Demographic characteristics	Logistic Regression
3	Manan <i>et al.</i> , 2015	Malaysia	To investigate job satisfaction	NA	161 pharmacists	Demographic characteristics	Regression
4	Al-Haroon and Al-Qahtani, 2020	Saudi Arabia	To discover how the most important demographic factors affect how happy nurses are with their jobs.	NA	337 nurses	Demographic characteristics	Regression
5	Oh, Kim and Kim, 2019	Korea	To investigate factors affecting satisfaction	NA	6849 respondents	Demographic characteristics Medical environmental characteristic Job Satisfaction	Chi-square ordinal logistic regression
6	Chamberlain <i>et al.</i> , 2016	Canada	To investigate the personal and institutional influences on job satisfaction	NA	1224 respondents	Five-point Likert scale Socio-demographic and education information Work-related characteristics Organizational context utilizing the 10 ideas from the Alberta Context Tool. The burnout risk in care aides (The Maslach Burnout Inventory/MBI) Job Satisfaction - 4 items Computer self-efficacy using 5-point Likert scale Goal awareness - 3 items	Mixed Effects Ordered Logistic Regression
7	Hwang, Lee and Shin, 2016	US	To understand how IT self-efficacy and goal awareness affect job satisfaction	McClelland's Need for Achievement Theory, Social cognitive theory	352 respondents	Goal awareness - 3 items	Partial Least Square

No	Author(s), Year	Country	Aim	Theoretical Framework	Participants	Measurement/ Instrument	Analysis
8	Aloisio <i>et al.</i> , 2019	Canada	To determine the demographic, personal, and organizational factors that influence job satisfaction	Psychological Empowerment Theory and the Structural Empowerment Theory	168 respondents	Three items of Job Satisfaction (The Michigan Organizational Assessment Questionnaire) Demographic factor Individual Level Organizational Level	Regression
9	Li and Xie, 2020	Chinese	To explore the quality of life, personality traits, and job satisfaction	NA	1423 respondents	Personality – 44 items (Big Five Inventory (BFI)), Professional Quality of Life (ProQL) - 30 items (Chinese version of Stamm's) Job Satisfaction - 20 items (Minnesota Satisfaction Questionnaire, adapted from China (MSQ))	Parallel multiple mediator - PROCESS v3.1 macro
10	Kaur and Malodia, 2017	India	To understand how emotional labor affects work satisfaction	NA	586 respondents	Emotional Labour -The Dutch questionnaire Job Satisfaction	Structural Equation Modelling
11	Tarcan <i>et al.</i> , 2017	Turkey	To know the association between fatigue and job satisfaction, factors that affect job satisfaction	NA	250 respondents	Basic MBI MSQ questionnaire (10 item) Socio-demographic (22 items) Occupational factors, Five-point Likert scale. Intrinsic satisfaction, extrinsic satisfaction, and two items were general satisfaction questions	Multiple Linear Regression
12	Arkwright, Edgar and Debenham, 2018	Australia	To investigate the internal elements that affect job satisfaction	NA	203 respondents	Demographics, career intentions, job characteristics with 5-point Likert scale	Univariate linear regression model
13	Ayalew <i>et al.</i> , 2021	Ethiopia	To identify intrinsic factors that affect job satisfaction	NA	280 nurses	MSQ and motivational factor questionnaire with 5-point Likert scale. Sociodemographic variable on job satisfaction.	Logistic regression
14	Gustafsson <i>et al.</i> , 2018	Sweden	To investigate job satisfaction levels and related factors	NA	222 respondents	Questionnaire information from the literature of McCann <i>et al.</i> Characteristics of work environment, workload, and tasks, time.	Simple and multiple logistic regression

No	Author(s), Year	Country	Aim	Theoretical Framework	Participants	Measurement/ Instrument	Analysis
15	Karanikola <i>et al.</i> , 2020	Greece	To investigate the intensity of depressive symptoms, satisfaction levels, and empathy	Clinical empathy attitude theory	206 nursing personnel	JES-HP to evaluate yourself from a professional empathy attitude with 7-point Likert scale. IWA (evaluates professional satisfaction level. CES-D to evaluate the intensity of depressive symptoms)	Anova Pearson's parametric coefficient
16	Khalafallah <i>et al.</i> , 2020	US	To understand the impact of pandemics on fatigue and job satisfaction	NA	531 neurosurgeons	Demographics, workflow changes, stress, satisfaction, and fatigue. Five-point Likert scale. Fatigue rated using MBI with 7-point Likert scale	Multivariate binary logistic regression analysis
17	De Simone, Planta and Cicotto, 2018	Italy	To figure out how employee satisfaction and employee engagement affect plans to leave a hospital	NA	22 wards, 194 nurses	Job satisfaction was measured through the Italian version questionnaire with a 7-point Likert scale.	Pearson correlation Anova
18	Halcomb <i>et al.</i> , 2021	Australia	To know the relationship between job satisfaction with the intention of moving	NA	911 nurses	Job satisfaction questionnaire with 20 question items using a 5-point Likert scale	Exploratory and confirmatory factors
19	Meilianti <i>et al.</i> , 2022	London	To identify the factors in determining satisfaction	NA	1014 pharmaceutical	Five-point Likert scale	Multiple linear regression
20	Faramarzpour <i>et al.</i> , 2021	Iran	To find out how nurses feel about the ethical climate and how satisfied they are with their jobs	NA	110 nurses	Olson's ethical climate and Luthan's job satisfaction questionnaire	Anova coefficients
21	Elsahoryi <i>et al.</i> , 2022	Jordan	To determine the job satisfaction	NA	542 nutritionists	Demographic characteristics, job satisfaction survey (5-point Likert scale)	Pearson test, linear regression
22	Alrawahi <i>et al.</i> , 2020	Oman	To know the job satisfaction based on Herzberg theory	Herzberg's two-factor	101 laboratory professionals	FGD	FGD
23	Abdulloev, 2018	Tajikistan	To study the employment-migration's job satisfaction	NA	4860 households	Living Standard Survey A semiparametric Method for estimating binary response models by Blundell and Powell Three-point Likert scale	Parametric ordered probit regression

No	Author(s), Year	Country	Aim	Theoretical Framework	Participants	Measurement/ Instrument	Analysis
24	Akuffo <i>et al.</i> , 2021	Ghana	To know the influence of job satisfaction and its associated factors	NA	304 registered and licensed optometrists	Cross-sectional survey Five-point Likert scale Part A comprising 21 items of sociodemographic characteristics Part B comprising 15 items of 14 factors responsible for participants' satisfaction level.	Linear Regression analyses
25	Aloisio <i>et al.</i> , 2018	Canada	To determine the variables that influence work satisfaction	Kanter's Theory of Structural Empowerment Spreitzer's Theory of Psychological Empowerment	334 participants	TREC allied healthcare provider survey Demographics, individual factors, and organizational context variables	General Estimating Equation model
26	Alrawashdeh <i>et al.</i> , 2021	Jordan	To find out burnout and levels of job satisfaction	Herzberg's Two-Factor Theory of Motivation and The Job Demands-Resources Model	973 participants for survey, 11 participants for interview	The 10-Item Burnout Measure-Short version The 5-Item Short Index of Job Satisfaction Semi-structured interviews Seven-point Likert scale A self-administered questionnaire that is structured.	Multivariable linear regression
27	Kagan, Hendel and Savitsky, 2021	Israel	To examine the relationships between personal initiative, work environment, and job satisfaction	NA	1040 nurses	Individual initiative, the working environment for nurses, job satisfaction, and responder demographic A six-point Likert scale	ANOVA Association test with chi-square Correlation test with Kendall's Tau coefficient Principal component analysis
28	Merga and Fufa, 2019	Ethiopia	To know the impact of the working environment and benefits packages on the level of satisfaction	NA	422 health workers	Cross-sectional study design Five-point Likert scale Job satisfaction (22 question items) Working and living conditions (15 items) Benefits and compensation perception that was evaluated using nine items.	
29	Negri <i>et al.</i> , 2021	Italy	To investigate the interaction of job meaning and positive affectivity in predicting job satisfaction	NA	108 healthcare professionals	The Work Satisfaction Questionnaire and the Eudaimonic and Hedonic Happiness Inquiry measure job satisfaction and job meaning. Cross-sectional study design Seven-point Likert scale	Correlation Hierarchical regression analysis

No	Author(s), Year	Country	Aim	Theoretical Framework	Participants	Measurement/ Instrument	Analysis
30	Temesgen, Ayeheh and Leshargie, 2018	Ethiopia	To assess job satisfaction and associated factors among health professionals working	NA	575 health professionals	Cross-sectional study A pre-tested and structured self-administered questionnaire was used Twenty-point Likert scale Institutional characteristics Behavioral characteristics Five-point Likert scale The introductory demographic questions page, the PSM scale, the work happiness scale, and the job performance scale using survey battery.	Multivariable logistics regression Bivariate and multivariate analysis Multivariate analysis of covariance Exploratory factor analysis Correlations Linear Regression
31	Stefurak, Morgan and Johnson, 2020	US	To examine public service motivation (PSM)'s relationship to self-reported job satisfaction and job performance	NA	158 nurses	Neff's index self-compassion with 26 items scale ProQL scale Pittsburgh Sleep Quality Index	Exploratory factor analysis Mediator regression analysis Structural Equation Modeling
32	Vaillancourt and Wasykiw, 2020	US	To investigate the connections between self-compassion, burnout, job satisfaction, and restfulness	NA	240 doctors	The job satisfaction survey consisting of 36 items Six-point Likert scale Nine facet scale	Exploratory factor analysis Mediator regression analysis Structural Equation Modeling
33	Srivastava, Misra and Madan, 2019	India	To assess the link between work-family conflict, doctor-patient relationships, and job satisfaction among doctors	A "two-factor theory" of job satisfaction by Herzberg	908 doctors	Using cross-sectional survey The demographics, perceived job satisfaction, and perceived work-family conflict, and perceived doctor-patient relationship questions were designed by the National Health and Family Planning Commission of the People's Republic of China. Five-point Likert scale	Exploratory factor analysis Mediator regression analysis Structural Equation Modeling

Table 2. Determinants of Job Satisfaction

Determinants of job satisfaction	Significantly increased	Significantly decreased	Not significant
Demographic			
Age	(Abdulloev, 2018; Gustafsson <i>et al.</i> , 2018; Merga and Fufa, 2019; Al-Haroon and Al-Qahtani, 2020)	NA	(Chamberlain <i>et al.</i> , 2016; Tarcan <i>et al.</i> , 2017; Deng <i>et al.</i> , 2018; Temesgen, Aycheh and Leshargie, 2018; Akuffo <i>et al.</i> , 2021)
Education	(Abdulloev, 2018; Temesgen, Aycheh and Leshargie, 2018)	(Deng <i>et al.</i> , 2018)	(Abdulloev, 2018; Deng <i>et al.</i> , 2018; Al-Haroon and Al-Qahtani, 2020; Stefurak, Morgan and Johnson, 2020; Kagan, Hendel and Savitsky, 2021)
Gender	(Abdulloev, 2018; Kagan, Hendel and Savitsky, 2021)(Chamberlain <i>et al.</i> , 2016; Temesgen, Aycheh and Leshargie, 2018; Al-Haroon and Al-Qahtani, 2020; Stefurak, Morgan and Johnson, 2020; Akuffo <i>et al.</i> , 2021)	NA	(Chamberlain <i>et al.</i> , 2016; Deng <i>et al.</i> , 2018; Temesgen, Aycheh and Leshargie, 2018; Al-Haroon and Al-Qahtani, 2020; Stefurak, Morgan and Johnson, 2020; Akuffo <i>et al.</i> , 2021)
Professional allowance	NA	(Merga and Fufa, 2019)	NA
Salary	(Manan <i>et al.</i> , 2015; Tarcan <i>et al.</i> , 2017; Arkwright, Edgar and Debenham, 2018; Akuffo <i>et al.</i> , 2021)	(Abdulloev, 2018; Al-Haroon and Al-Qahtani, 2020; Alrawashdeh <i>et al.</i> , 2021)	NA
Work experience	NA	NA	(Abdulloev, 2018; Al-Haroon and Al-Qahtani, 2020; Akuffo <i>et al.</i> , 2021)
Working hours per week	(Akuffo <i>et al.</i> , 2021)	NA	NA
Personal Factor			
Attitude: Professional	(Majima <i>et al.</i> , 2019)	NA	NA
Attitude: Improving team cohesion	(Majima <i>et al.</i> , 2019)	NA	NA
Burnout	NA	(Aloisio <i>et al.</i> , 2018; Srivastava, Misra and Madan, 2019; Vaillancourt and Wasylkiw, 2020; Alrawashdeh <i>et al.</i> , 2021)	NA
Burnout: Cynicism	(Chamberlain <i>et al.</i> , 2016)	(Aloisio <i>et al.</i> , 2018)	(Aloisio <i>et al.</i> , 2019)
Burnout: Efficacy	(Chamberlain <i>et al.</i> , 2016; Aloisio <i>et al.</i> , 2019)		(Aloisio <i>et al.</i> , 2018)
Burnout: Emotional Exhaustion	(Chamberlain <i>et al.</i> , 2016)	(Tarcan <i>et al.</i> , 2017)	(Aloisio <i>et al.</i> , 2018, 2019)
Burnout: Personal accomplishment	NA	NA	(Tarcan <i>et al.</i> , 2017)

Determinants of job satisfaction	Significantly increased	Significantly decreased	Not significant
Burnout:	NA	NA	(Tarcan <i>et al.</i> , 2017)
Depersonalization			
Career advancement opportunities	(Akuffo <i>et al.</i> , 2021)	NA	NA
Compassion	(Stefurak, Morgan and Johnson, 2020; Vaillancourt and Wasylikiw, 2020)	NA	NA
Continuing education opportunities	(Akuffo <i>et al.</i> , 2021)	NA	NA
Contribution	(Manan <i>et al.</i> , 2015)	NA	NA
Control	(Akuffo <i>et al.</i> , 2021)	NA	NA
Creativity	(Lee and Jang, 2020)	NA	NA
Emotional labor	(Lee and Jang, 2020)	(Kaur and Malodia, 2017)	NA
Empowerment: Competence	(Aloisio <i>et al.</i> , 2019)	(Aloisio <i>et al.</i> , 2018)	NA
Empowerment: Impact	(Aloisio <i>et al.</i> , 2018, 2019)	NA	NA
Empowerment: Meaning	(Aloisio <i>et al.</i> , 2018, 2019)	NA	NA
Empowerment: Self-Determination	(Aloisio <i>et al.</i> , 2018, 2019)	NA	NA
Encouragement	(Akuffo <i>et al.</i> , 2021)	NA	NA
Formal Interactions	NA	(Aloisio <i>et al.</i> , 2018)	NA
A general practitioner or a specialist	NA	(Alrawashdeh <i>et al.</i> , 2021)	NA
High levels of collaboration between nurses and physicians	(Abdulloev, 2018; Kagan, Hendel and Savitsky, 2021)	NA	NA
Goal awareness	(Hwang, Lee and Shin, 2016; Akuffo <i>et al.</i> , 2021)	NA	NA
Informal interactions	NA	NA	(Aloisio <i>et al.</i> , 2018)
Job happiness	(Negri <i>et al.</i> , 2021)	NA	NA
Job is affiliated with a social security scheme	(Abdulloev, 2018)	NA	(Temesgen, Aycheh and Leshargie, 2018)
Job security	(Akuffo <i>et al.</i> , 2021)	NA	NA
Lower stress in the work	(Abdulloev, 2018)	NA	NA
Mental health status	(Aloisio <i>et al.</i> , 2019)	NA	(Aloisio <i>et al.</i> , 2018)
Non-financial incentives	(Akuffo <i>et al.</i> , 2021)	NA	NA
Nurse's autonomy	(Manan <i>et al.</i> , 2015; Abdulloev, 2018)	NA	NA
Personality	(Li and Xie, 2020)	NA	NA
Personal initiative	(Aloisio <i>et al.</i> , 2018)	NA	NA
Primary role	(Abdulloev, 2018)	NA	NA
Private	NA	(Akuffo <i>et al.</i> , 2021)	NA
Problem solving	(Aloisio <i>et al.</i> , 2019)	NA	(Aloisio <i>et al.</i> , 2018)

Determinants of job satisfaction	Significantly increased	Significantly decreased	Not significant
Quality of work-life	(Srivastava, Misra and Madan, 2019)	NA	NA
Recognition	(Akuffo <i>et al.</i> , 2021)	NA	(Manan <i>et al.</i> , 2015)
Responsibility to work	(Akuffo <i>et al.</i> , 2021)	NA	NA
Seniority in the profession	(Abdulloev, 2018)	NA	NA
Social Capital	(Aloisio <i>et al.</i> , 2018)	NA	NA
Task variety	(Akuffo <i>et al.</i> , 2021)	NA	NA
Work engagement: Absorption	(Aloisio <i>et al.</i> , 2019)	NA	(Aloisio <i>et al.</i> , 2018)
Work engagement: Dedication	(Aloisio <i>et al.</i> , 2019)	NA	(Aloisio <i>et al.</i> , 2018)
Work engagement: Vigor	(Aloisio <i>et al.</i> , 2019)	NA	(Aloisio <i>et al.</i> , 2018)
Work environment	(Kagan, Hendel and Savitsky, 2021)	NA	NA
Workload	(Temesgen, Aycheh and Leshargie, 2018; Akuffo <i>et al.</i> , 2021)	NA	NA

Unfortunately, this study only examined internal factors that affect healthy individuals' job satisfaction. Hence, further study is needed to discover external factors that affect job satisfaction and techniques to improve employee job satisfaction.

Seminars and workshops are needed to raise health workers' understanding of tiredness and its avoidance (Alrawashdeh *et al.*, 2021). Stress management, resilience, and coping technique training can help people deal with weariness. Healthcare workers can overcome burnout and improve job satisfaction with training, workshops, and incentives. However, this study only examined internal characteristics that may affect job satisfaction in healthcare personnel. Therefore, future studies should identify external factors that affect job satisfaction and ways to improve it.

Conclusion

This systematic review examines 34 quantitative studies on job satisfaction. The studies reviewed were conducted between 2015 and 2022. The review found several demographic and personal factors affecting job satisfaction. However, job satisfaction is

unrelated to many demographic factors. Meanwhile, personal factors are multifaceted. Burnout is the most researched factor. In this case, healthcare who experience burnout are more likely to cause medical errors since it requires considerable caution. Therefore, in order to improve job happiness, a burnout plan is needed.

Abbreviations

WHO: World Health Organization; SD: Standard Deviation; ISP: Integrated Services Pos; Posyandu: *Pos Pelayanan Terpadu*; OR: Odds Ratio; PHC: Primary Health Care.

Declarations

Ethics Approval and Consent Participant
Not applicable.

Conflict of Interest

The authors declare that there is no personal interest influences this study.

Availability of Data and Materials

Data availability based on open repository data or on request.

Authors' Contribution

MY and RDW conceptualized the study; MY wrote the original draft; RDW reviewed, and edited the manuscript.

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