

## Factor Affecting Job Satisfaction in Community Pharmacists: A Review

Sintaresmi Kusumah Wardani<sup>1</sup>, Susi Ari Kristina<sup>2\*</sup>, Nanang Munif Yasin<sup>2</sup>

<sup>1</sup> Master Program in Pharmacy, Faculty of Pharmacy, Universitas Gadjah Mada

<sup>2</sup> Department of Pharmaceutics, Faculty of Pharmacy, Universitas Gadjah Mada

Submitted: 25-01-2023

Revised: 01-03-2023

Accepted: 06-07-2023

Correspondent : Susi Ari Kristina ; Email : susiari\_k@ugm.ac.id

### ABSTRACT

Job satisfaction, especially pharmacists', must be considered, as their work is related to patient safety. This review aims to identify job satisfaction, the factors that influence it, and the instruments used to measure it in community pharmacists. This systematic review used the PRISMA methodology and was conducted in December 2022 using three search engines (PubMed, Science Direct, and Google Scholar) by retrieving articles published in the last ten years. Two researchers independently assess the quality of articles using JBI Critical Appraisal. The keywords "Job Satisfaction" and "Community Pharmacist" were used to search articles and 360 articles were obtained. In this review, only eight articles met the criteria. The inclusion criteria include cross-sectional studies, publication in English between 2012 and 2022, and research topics on the job satisfaction of community pharmacists. This systematic review excludes duplicate articles and no full text and is included in pilot projects, reviews, letters, or comments. Three articles from Lithuania, the US, and Sweden reported high levels of job satisfaction; five articles from Iraq, Jordan, Malaysia, and Ethiopia reported moderate to low levels. Only one study did not report job satisfaction levels. The results showed that community pharmacists have low to high job satisfaction with several influencing factors, namely demographic factors (gender, age, working hours), intrinsic (recognition), and extrinsic (income). The limitation of this study is the number of articles included, there are differences in the identification of influence factors, and the studies are only quantitative.

**Keywords:** characteristics of demography factors; intrinsic and extrinsic factors; job satisfaction; review

### INTRODUCTION

Employee motivation depends on an institution's ability to create an appropriate environment that can help increase job satisfaction. This job satisfaction value reflects employee performance, so institutions must maintain and even increase this value. One of the jobs that require job satisfaction monitoring is the pharmacist profession<sup>1</sup>. Pharmacists need to understand that their work is related to patient safety and must be careful of the possibility of errors in service and drug administration. Pharmacists' job satisfaction needs to be considered because whether or not they are satisfied has a fatal impact on their practice, especially community pharmacists who are the first people encountered by the public regarding their health<sup>2,3</sup>.

There have been many studies on job satisfaction in community and hospital

pharmacists from various countries with different results. However, community pharmacists are in a transitional environment with many influencing factors that may lead to workplace stress. This may be due to the pharmacist's previous position and higher role expectations, compounded by the various interactions required and the unique characteristics of each pharmacist. A study conducted in southwest Ethiopia reported that 61% of pharmacists were satisfied with their job, allowing them to help patients in need and thus fulfill their professional satisfaction. On the other hand, 39% felt that the income received needed to be increased, and the lack of interaction with other health workers caused them to feel dissatisfied with their work<sup>4</sup>. Another study showed that community pharmacists in India and Iran showed low satisfaction levels. This is due to the inadequacies of the health systems in those

countries. However, this satisfaction or dissatisfaction can also be caused by other factors, such as intrinsic and extrinsic factors, directly related to pharmacists' job satisfaction<sup>5,6</sup>.

The use of instruments in previous studies gave different results. This different result leads to differences in the value of job satisfaction and the factors that influence it<sup>7</sup>. Previous research provides information related to job satisfaction and factors that affect job satisfaction<sup>8,9</sup>. From several studies that explain the level of satisfaction and factors that influence job satisfaction, there needs to be more explicit information on job satisfaction, specifically for community pharmacists. Therefore, this systematic review aims to summarise and identify job satisfaction, the factors that influence it, and determine the instruments used to measure it in community pharmacists.

## METHODS

The systematic review used the protocol PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines<sup>10</sup>. This systematic review focuses on the level of job satisfaction in community pharmacists and the factors that influence it. The article research was conducted in December 2022 through databases from Pubmed, Science Direct and Google Scholar published within ten years between 2012 and 2022. The search strategy used was to write the search keywords "Job Satisfaction" and "Community Pharmacists" by adding Boolean logic (AND) between the two keywords in the database used.

Articles were selected based on the inclusion and exclusion criteria. Inclusion criteria included cross-sectional research, publication in English from 2012 to 2022, and articles discussing job satisfaction in community pharmacists. If there was duplication of articles, no full-text, and included in pilot projects, reviews, letters, or comments, then the article was not included in this systematic review. After obtaining articles that met the criteria, two authors

independently selected articles based on title and abstract. A third author was involved if there was disagreement during selection, and the majority vote made the decision.

Two authors independently screened full-text articles using a quality checklist using the JBI Critical Appraisal Checklist, which consists of 8 items used to evaluate the quality of articles<sup>11</sup>. This quality evaluation was used to determine the validity and minimize bias in the selected articles. If there was a difference of opinion between the authors during data extraction, it was resolved by discussion between the authors. The quality assessment of the articles consisted of eight questions which included intelligible (2 questions), validity and reliability (2 questions), objective (1 question), confounding factors (2 questions), and statistical analysis (1 question). This checklist was used to assess the quality of analytical cross-sectional studies. The study was scored as 'yes,' 'no,' 'unclear,' or 'not applicable.' The 'yes' option has a value of 1 point, while the other options have a value of 0. If the final score is  $\geq 50\%$  or has 4 'yes' answers, then the article meets the criteria<sup>12</sup>.

Articles that met the criteria were extracted using Microsoft Excel, including article number, author and year, country, total respondents, and research instrument to summarise the characteristics of the article. Information related to job satisfaction was described with factors influencing job satisfaction and community pharmacists' level of job satisfaction.

## RESULT AND DISCUSSION

### Study Selection

Article searches were conducted using two primary databases, Pubmed (29 articles) and Science Direct (99 articles), and an additional search was conducted using Google Scholar (232 articles) (Appendix I). The author identified 354 articles obtained after duplication selection. Three hundred twenty-nine articles were found to be unrelated to job satisfaction, 11 were literature reviews, and one was a letter. Therefore, 341 articles were excluded after screening titles and abstracts,

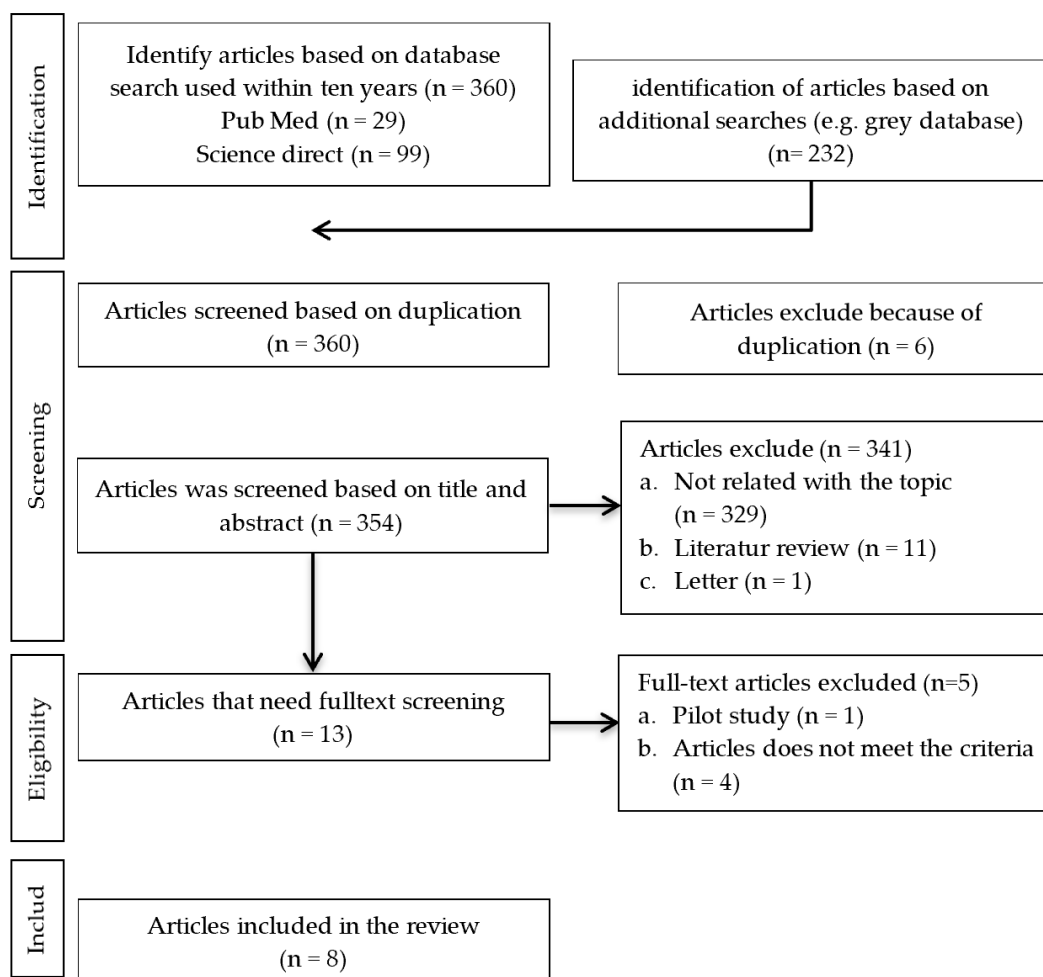


Figure 1. Diagram of articles included in the analysis

and 13 were generated for eligibility selection. However, four articles were excluded because the articles did not meet the inclusion criteria, and one article was included in the pilot study. Thus, eight articles were included in this systematic review (Figure 1).

### Article Quality Assessment

The results of the article quality assessment using the JBI Critical Appraisal Checklist for Analytical Cross-Sectional Studies<sup>11</sup> showed a score of more than 50% for all articles obtained, so the methodology was said to be good (Table I).

### Study Characteristics

The characteristics of the study are listed in Table II. The study was conducted among community pharmacists in eight countries between 2012 and 2022. All studies were cross-sectional, with the countries included in this study consisting of three developed countries (Lithuania, US, Sweden) and five developing countries (Iraq, Indonesia, Jordan, Malaysia, and Ethiopia)<sup>13–15,16–20</sup>. This study aimed to summarise and identify job satisfaction and its influencing factors and determine the instruments used to measure job satisfaction in community pharmacists

**Table I. Article Quality Assessment used JBI Critical Appraisal Checklist for Analytical Cross-Sectional Studies<sup>11</sup>.**

Author, Year (Country)	Intel- ligible		validity and Measure reliability			-ment Confounding factors		statistical analysis	Total Score (%)
	1	2	3	4	5	6	7	8	
Ibrahim et al, 2021 (Iraq)	1	1	1	1	1	0	0	1	6 (75)
Rijaluddin et al, 2019 (Indonesia)	1	1	1	1	1	0	0	1	6 (75)
Al-Khalidi and Wazaify, 2013 (Jordan)	1	1	1	1	1	0	0	1	6 (75)
Urbonas and Kubilliene, 2015 (Lithuania)	1	1	1	1	1	0	0	1	6 (75)
Radwan et al, 2021 (US)	1	1	1	1	1	0	0	1	6 (75)
Gustafsson et al, 2017 (Sweden)	1	1	1	1	1	0	0	1	6 (75)
Teong et al, 2019 (Malaysia)	1	1	1	1	1	0	0	1	6 (75)
Yimam et al, 2021 (Ethiopia)	1	1	1	1	1	0	0	1	6 (75)

Criteria: (1) Criteria for inclusion in the sample, (2) study subjects and the setting, (3) exposure measured, (4) outcomes measured, (5) objective, standardized criteria used for measurement, (6) identified factors, (7) strategies to deal with confounding factors, (8) appropriate statistical analysis; The research was scored as 'yes,' 'no,' 'unclear,' or 'not applicable.' The 'yes' option has a value of 1 point, while the other options have a value of 0; Score quality of study: more than 50% or have 4 'yes' scores, the article has met the criteria (%)

reported in eight good-quality studies. One of the eight articles in this study addressed factors affecting job satisfaction by identifying barriers in community pharmacists<sup>17</sup>. Seven other studies addressed factors affecting job satisfaction by identifying pharmacists' characteristics and intrinsic and extrinsic factors<sup>13-16,18-20</sup>.

### Instrument of Study

Accuracy in selecting instruments used in data collection is crucial because it can determine the quality of data obtained and the quality of research<sup>21</sup>. Questionnaires are one of the data collection tools widely used to collect data in health and social research and are usually associated with quantitative research such as satisfaction<sup>22</sup>. The systematic review results show that there is more than one type

of instrument that can be used for data collection in measuring job satisfaction and knowing the factors that influence it.

The majority of studies identify job satisfaction using questionnaires. In identifying job satisfaction, Ibrahim et al.<sup>16</sup>, used a demographic questionnaire of age, gender, educational level, years in practice, working patterns, working hours, and the number of consumers per day. In addition, the Warr-Cook-Wall satisfaction scale instrument was used to see the level of job satisfaction of community pharmacists in Baghdad, Iraq. Four other studies used a developed existing questionnaire consisting of two sections, including (1) Rijaluddin et al.<sup>17</sup>, with the first section on pharmacist demographics and the second section on job barriers that can affect the job satisfaction of pharmacists in Central

Table II. Characteristics of the included articles

Author (s), Year	Country	Objective	Sample size (n=)	Instrument Tools
Ibrahim et al, 2021 <sup>16</sup>	Baghdad, Iraq	Identify the impact of pharmacist characteristics on job satisfaction, and rate the level of job satisfaction among Iraqi community pharmacists.	436	Demography questionnaire, warr-cook-wall satisfaction scale
Rijaluddin et al, 2019 <sup>17</sup>	East Java, Indonesia	Investigate the factors influencing the satisfaction of work among community pharmacists in Indonesia.	507	Developed existing questionnaire
Khalidi and Wazaify, 2013 <sup>18</sup>	Amman, Jordan	To assess the job satisfaction and stress level among Amman's pharmacists.	235	Adapted existing questionnaire
Urbonas and Kubiliene, 2015 <sup>13</sup>	Lithuania	To investigate the correlation between community pharmacies' utilization of over-the-counter counselling and job satisfaction.	305	Developed existing questionnaire
Radwan et al, 2021 <sup>14</sup>	Virginia, US	To determine factors that indicate the job satisfaction of pharmacists in Virginia.	6042	Validated single-item measure
Gustafsson et al, 2017 <sup>15</sup>	Sweden	To find out how satisfied graduates are with their jobs and the factors that contribute to that satisfaction.	222	Developed existing questionnaire
Teong et al, 2019 <sup>19</sup>	Klang Valley, Malaysia	Examined the levels of job satisfaction and stress and related variables among community pharmacists in Malaysia's Klang Valley.	286	The self-administered questionnaire
Yimam et al, 2021 <sup>20</sup>	Mizan Aman and Tepi Town, Ethiopia	To evaluate the level of job satisfaction for pharmacy professionals working at retail pharmacies in the South Western Ethiopian towns of Mizan-Aman and Tepi.	33	Developed existing questionnaire

Java, Indonesia; (2) Gustafsson et al.<sup>15</sup>, with the first section on pharmacists characteristics (work setting, workload, present duties, length of practice, position, and the number of pharmacists staff), and the second section on job satisfaction which contains five questions that have been validated from previous studies; (3) Yimam et al.<sup>20</sup>, with the first section

being socio-demographic (average working hour a day and income per month) and the second section being questions aimed at determining the level of job satisfaction of community pharmacists in Ethiopia; (4) Urbonas and Kubiliene<sup>13</sup>, with the first section being demography and the second section being job satisfaction. Al Khalidi and

**Table III. Factor affecting and overall job satisfaction**

Author (s), Year (country)	Factor affecting job satisfaction	Overall job satisfaction
Ibrahim et al, 2021 <sup>16</sup> (Iraq)	Factor that can affected pharmacists job satisfaction are pharmacist characteristics including gender (p<0.001), age (p<0.002), years in practice (p<0.003), working pattern (p<0.001) and working hours (p<0.004).	Moderately satisfied with their job
Rijaluddin et al, 2019 <sup>17</sup> (Indonesia)	It was found that dominant factor affecting pharmacists job satisfaction are intrinsic factors (community recognition 73.6%; other health professionals recognition 57.4%; interaction and coordination with the physician 53.7%); and extrinsic factors (time for communication with patient 72.9%; total staff 59.1%; facilities 53.4%; difficulties in procurement of medicine 52.5%; knowledge and abilities of non-pharmacists employees 51.6%)	NA
Khalidi and Wazaify, 2013 <sup>18</sup> (Jordan)	Factors that significantly affected pharmacists satisfaction are type of pharmacy practice setting (p=0.038); registration year (p=0.048); and marital status (p=0.023)	Community pharmacists has less job satisfaction
Urbonas and Kubiliene, 2015 <sup>13</sup> (Lithuania)	Pharmacists socio-demographic characteristics that affected job satisfaction is age (f <sup>2</sup> =0.07)	Pharmacists have exceeded the neutral range of level of job satisfaction
Radwan et al, 2021 <sup>14</sup> (US)	Factors that can improved job satisfaction is pharmacists characteristics include gender (p=0.005); working hours (p=0.012); and income (p=0.002)	Pharmacist have a high job satisfaction
Gustafsson et al, 2017 <sup>15</sup> (Sweden)	Higher job satisfaction affected by age (0.236), accessibility to Continuing Professional Development (CPD) (p<0.001), and knowledge and skill (p=0.001)	Pharmacists were satisfied with the job
Teong et al, 2019 <sup>19</sup> (Malaysia)	The demographic and job related that affected job satisfaction are ethnicity (p=0.026); and average of prescription a day (p=0.016)	Majority pharmacists have moderately satisfied with their job
Yimam et al, 2021 <sup>20</sup> (Ethiopia)	Factor that can affected pharmacists job satisfaction are recognition (81.8%); income (54.5%);	Majority pharmacists were satisfied with their job

Description: NA = Not Available

Wazaify<sup>18</sup> used an adapted existing questionnaire consisting of four sections (1) demographic and job characteristics, (2) job satisfaction, (3) job-related stress, and (4) free-text response part). Teong et al.<sup>19</sup> used a self-administered questionnaire consisting of

four sections, namely (1) pharmacists' demographic, (2) level of job satisfaction and job stress, (3) factors related to job satisfaction (intrinsic and extrinsic), and (4) job-related stress among pharmacists.

### **Factors Affecting Job Satisfaction**

In every job, employee job satisfaction is one aspect that must be considered. In the health sector, one of which is the pharmacy, job satisfaction is one aspect that can provide an overview of the high and low quality of pharmaceutical services<sup>1</sup>. This level of job satisfaction cannot be separated from the factors that influence job satisfaction. Several factors influence job satisfaction, including intrinsic, extrinsic, and individual factors (psychological factors such as character, attitude, and habits, or it could also be a demographic factor)<sup>23</sup>.

The results of the eight articles included in this systematic review<sup>13-20</sup> show that pharmacists' demography and job characteristics, intrinsic and extrinsic factors are factors that are often measured for their influence on job satisfaction, with the review results showing that of the demography and job characteristics factors that are widely reported to influence job satisfaction are age<sup>13,15,16</sup>, gender<sup>14,16</sup>, working hours<sup>14,16</sup>. Intrinsic factors were reported to be affected is recognition<sup>17,20</sup>. While the extrinsic factors are reported to have an effect is income<sup>14,20</sup>.

Generally, community pharmacists have the same factors in affecting job satisfaction. In articles that discuss influence factors based on demographic factors and job characteristics, the differences in factors affecting job satisfaction are usually caused by differences in the characteristics of respondents in each research site. Meanwhile, articles that discuss influence factors based on intrinsic and extrinsic factors show similarities, namely being influenced by recognition (intrinsic) and income (extrinsic) factors. Both factors have an essential role in pharmacists' job satisfaction, impacting motivation and performance. According to Herzberg's two-factor theory, intrinsic factors

are included in the motivation factors that can improve employees' job satisfaction. In contrast, extrinsic factors are included in the hygiene factors that can prevent workers from dissatisfaction<sup>24</sup>. This theory is in line with Maslow's theory (Hierarchy of needs theory) with five levels of needs which argues that employees will not be motivated to give their best performance if their basic needs (in this case included in extrinsic or hygiene factors) are not met because this factor only prevents employees from perceived dissatisfaction and will not increase their motivation. So it is necessary to fulfill needs at a higher level (in this case, including intrinsic or motivation factors) to provide satisfaction to employees to increase motivation to provide their best performance<sup>24</sup>. This literature review is in line with the previous review by Le et al. on job satisfaction research conducted on dentists, reporting that income is included in the factor with the lowest satisfaction<sup>9</sup>. In addition, other studies from Berassa et al. and Lorga et al. reported that income is also one factor determining high and low job satisfaction in pharmacists working in hospitals<sup>25,26</sup>. Research conducted by Rijaluddin et al. reported that intrinsic and extrinsic factors affect pharmacists' job satisfaction<sup>3</sup> so the institution should consider these factors to improve and maintain pharmacists' job satisfaction.

### **Overall Job Satisfaction**

The results of a literature review of eight articles obtained, research conducted in developed countries (Lithuania, US, and Sweden)<sup>13-15</sup> showed above-average to high levels of job satisfaction. Meanwhile, in developing countries (Iraq, Jordan, Malaysia, and Ethiopia)<sup>16,18-20</sup>, the levels of overall job satisfaction are satisfied, moderate to low. The difference in job satisfaction levels is partly due to differences in economic levels between developed and developing countries. Yimam et al.<sup>20</sup>, reported that Ethiopian pharmacists were less satisfied than Chinese pharmacists regarding the salary received. Although China is equally included in developing countries, China can go above Ethiopia in paying

**Appendix I. Detailed search strategy for each database**

Database	Detailed search strategies	Records found
PUBMED		29
SCIENCE DIRECT	“Job Satisfaction” AND “Community Pharmacists”	99
Google Scholar		232

The final total in the literature search was 360 articles, 29 from PubMed, 99 from Science Direct, and 232 from the manual search using Google Scholar. The articles were selected according to the inclusion criteria listed in Materials and Methods (Figure 1).

**Appendix II. Methodological JBI Critical Appraisal Checklist for Analytical Cross-Sectional Studies**

<b>Intelligible</b>	
1	Were the criteria for inclusion in the sample clearly defined? 0.No or unclear or NA 1. Yes
2	Were the study subjects and the setting described in detail? 0.No or unclear or NA 1. Yes
<b>Validity and reliability</b>	
3	Was the exposure measured in a valid and reliable way? 0.No or unclear or NA 1. Yes
4	Were the outcomes measured in a valid and reliable way? 0.No or unclear or NA 1. Yes
<b>Objective</b>	
5	Were objective, standard criteria used for measurement of the 0.No or unclear or NA 1. Yes
<b>Confounding Factors</b>	
6	Were confounding factors identified? 0.No or unclear or NA 1. Yes
7	Were strategies to deal with confounding factors stated? 0.No or unclear or NA 1. Yes
<b>Statistical Analysis</b>	
8	Was appropriate statistical analysis used? 0.No or unclear or NA 1. Yes

Description: 0 = no or unclear or not available, 1 = yes. The total score of the eight questions is 100%; The article has met the criteria for a quality appraisal score: more than 50% or has 4 'yes' scores.



pharmacists' salaries. This finding is consistent with a review on dentist satisfaction, which reported that studies conducted in high-income countries showed that dentists were satisfied with their jobs<sup>9</sup>.

To increase the value of job satisfaction, good cooperation between employees, in this case, pharmacists and the owner/manager of the institution, is needed. From the pharmacist side, it is necessary to find, identify and prioritize factors that can provide satisfaction, such as having an interest in developing job skills and competencies, contributing to creating a positive work environment, and more actively involving themselves in decision-making. Meanwhile, the owner/manager needs to conduct periodic evaluations related to assessing pharmacists' job satisfaction factors, provide and fulfill the needs of pharmacists such as rewards, provide training, and provide a safe and enjoyable work environment so that a comfortable work atmosphere and high job satisfaction can help pharmacists provide quality pharmaceutical services.

#### LIMITATION

This research still has several limitations. First, the number of articles included in this study; second, the analysis results cannot be compared directly due to differences in the identification of influence factors, including some articles that examine the influence in terms of intrinsic and extrinsic factors only. In contrast, others only examine in terms of demographic factors; third, the studies are only quantitative.

#### CONCLUSION

This systematic review summarises the level of job satisfaction, some of the factors that influence it, and the instruments used. Eight articles from 2012-2022 met the research criteria. Community pharmacists' job satisfaction levels differed in each country, with different influencing factors. Based on individual characteristics, pharmacists are affected by age, gender, and working hours;

based on intrinsic factors, recognition affects job satisfaction. On extrinsic factors, the factor that affects job satisfaction is income. The most widely used instrument tools in collecting job satisfaction data are questionnaires, which are widely used to collect data in health and social research such as satisfaction. Further studies are needed involving more articles with similar influence factors, and it would be better to use qualitative and quantitative data collection methods to assess satisfaction levels and identify factors that affect job satisfaction in more detail.

#### ACKNOWLEDGEMENT

The authors would like to thank the Master of Pharmacy Study Programme of Universitas Gadjah Mada, the authors of the article, and the respondents who participated in the study.

#### REFERENCES

1. Ayele Y, Hawulte B, Feto T, Basker GV, Bacha YD. Job satisfaction among pharmacy professionals working in public hospitals and its associated factors, eastern Ethiopia. *J Pharm Policy Pract.* 2020;13(1):11.
2. Slimane NSB. Motivation and Job Satisfaction of Pharmacists in Four Hospitals in Saudi Arabia. *J Health Manag.* 2017;19(1):39-72.
3. Rijaluddin MK, Utami W, Othman Z, Yusuf E, Puspitasari HP, Hermansyah A. Arti Penting Kepuasan Kerja Bagi Apoteker: Antara Bertahan Atau Keluar Dari Pekerjaan. *J Farm Dan Ilmu Kefarmasian Indones.* 2020;7(1SI):39-47.
4. Ahmed SM, Tolera M, Angamo MT. Assessment of Job Satisfaction among Pharmacy Professionals in South-West Ethiopia. *Int J Pharm Sci Res.* 2013;4(6):2351-2358.
5. Foroughi Moghadam MJ, Peiravian F, Naderi A, Rajabzadeh A, Rasekh HR. An Analysis of Job Satisfaction among Iranian Pharmacists through Various Job Characteristics. *Iran J Pharm Res*

- IJPR*. 2014;13(3):1087-1096.
6. Ahmad A, Khan M, Elkalmi R, et al. Job Satisfaction among Indian Pharmacists: An Exploration of Affecting Variables and Suggestions for Improvement in Pharmacist Role. *Indian J Pharm Educ*. 2015;49:S1-S7.
  7. Thin SM, Nakpun T, Nitadpakorn S, Sorofman BA, Kittisopee T. What drives pharmacists' turnover intention: A systematic review. *Pharm Pract*. 2022;19(4):1-20.
  8. Yuliandani Y, Puspitasari IM, Alfian SD. Tingkat kepuasan kerja apoteker di rumah sakit dan apotek serta faktor-faktor yang mempengaruhinya: Literatur review. *Ris Inf Kesehat*. 2021;10(2):143.
  9. Le VNT, Dang MH, Kim JG, Yang YM, Lee DW. Dentist Job Satisfaction: A Systematic Review and Meta-analysis. *Int Dent J*. 2021;71(5):369-377.
  10. Page MJ, McKenzie JE, Bossuyt PM, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *BMJ*. Published online March 29, 2021:n71.
  11. Martin J. © Joanna Briggs Institute 2017 Critical Appraisal Checklist for Analytical Cross Sectional Studies. Published online 2017.
  12. Aqmarini AN, Gayatri D, Nuraini T, Yodang Y. Perbandingan Hasil Pengukuran EORTC QLQ-C30 dengan WHOQOL-BREF untuk mengukur kualitas hidup pada pasien kanker: telaah literatur. *J Keperawatan Muhammadiyah Bengkulu*. 2022;10(1):35-49.
  13. Urbonas G, Kubilienė L. Assessing the relationship between pharmacists' job satisfaction and over-the-counter counselling at community pharmacies. *Int J Clin Pharm*. 2016;38(2):252-260.
  14. Radwan RM, Bentley JP, Patterson JA, Dixon DL, Salgado TM. Predictors of job satisfaction among pharmacists: A regional workforce survey. *Explor Res Clin Soc Pharm*. 2022;5:100124.
  15. Gustafsson M, Mattsson S, Wallman A, Gallego G. Pharmacists' satisfaction with their work: Analysis of an alumni survey. *Res Soc Adm Pharm*. 2018;14(7):700-704.
  16. Ibrahim IR, Ibrahim MI, Majeed IA, Alkhafaje Z. Assessment of job satisfaction among community pharmacists in Baghdad, Iraq: a cross-sectional study. *Pharm Pract*. 2021;19(1):2190.
  17. Rijaluddin MK, Utami W, Othman Z, et al. Exploration of barriers affecting job satisfaction among community pharmacists. *J Basic Clin Physiol Pharmacol*. 2020;30(6).
  18. Al Khalidi D, Wazaify M. Assessment of pharmacists' job satisfaction and job related stress in Amman. *Int J Clin Pharm*. 2013;35(5):821-828.
  19. Teong WW, Ng YK, Paraidathathu T, Chong WW. Job satisfaction and stress levels among community pharmacists in Malaysia. *J Pharm Pract Res*. 2019;49(1):9-17.
  20. Mohammed Yimam, Teshome Sosengo, Gedefew Asmare. Assessment of Job Satisfaction Among Pharmacy Professionals Working at Drug Stores in Mizan Aman And Tepi Town, Southwest Ethiopia: A Cross-Sectional Study. *Open J Pharm Sci Res*. Published online February 10, 2021:12-20.
  21. Rosita T, Yuniati T. Pengaruh Kepuasan Kerja Terhadap Kinerja Karyawan dengan Komitmen Organisasional sebagai Variabel Intervening. *J Ilmu Dan Ris Manaj JIRM*. 2016;5(1). Accessed June 11, 2023. <http://jurnalmahasiswa.stiesia.ac.id/index.php/jirm/article/view/422>
  22. Bolarinwa OA. Principles and Methods of Validity and Reliability Testing of Questionnaires Used in Social and Health Science Researches. *Niger Postgrad Med J*. 2015;22(4):195.
  23. Chirchir R. Demographic Factors and Job Satisfaction: A Case of Teachers in Public Primary Schools in Bomet

- County, Kenya. *J Educ Pract.* 2016;7(13):152-158.
24. Tan SK. Herzberg's Two-Factor Theory on Work Motivation: Does it Works for Todays Environment? *Glob J Commer Manag Perspect.* 2013;2:18-22.
25. Iorga M, Dondaş C, Soponaru C, Antofie I. Determinants of Hospital Pharmacists' Job Satisfaction in Romanian Hospitals. *Pharmacy.* 2017;5(4):66.
26. Berassa MS, Chiro TA, Fanta S. Assessment of Job Satisfaction among Pharmacy Professionals. *J Pharm Policy Pract.* 2021;14(1):71.