








# “How well mental health workers are motivated: A case study from Croatia”

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# HOW WELL MENTAL HEALTH WORKERS ARE MOTIVATED: A CASE STUDY FROM CROATIA

## Abstract

Like the other medical professions, mental health workers need appropriate motivation for effective treatment work. This study aims to determine the motivators and assess working conditions of mental health workers and how they differ from the motivators and working conditions of other health workers on the example of one of the largest hospital institutions in Croatia – University Hospital Centre Zagreb. The study chose a survey method and distributed a questionnaire among 124 Zagreb University Hospital Centre health workers. The sample covers about 16% of the entire medical staff of the observed departments (psychiatry, emergency, microbiology, gynecology, anesthesiology, COVID-19 unit, and orthopedic surgery). The ANOVA method was used to detect differences in data groups. The results show that Croatian mental health workers are mainly motivated extrinsically. However, compared to other medical professions, e.g., gynecologists, orthopedists, or anesthesiologists, they are upper-middle motivated and leaders in several motivators. Observed Croatian mental health workers are more satisfied with their patient interactions than their colleagues. Female mental health workers are more motivated but less satisfied with the working conditions than males. The study showed that even in one medical institution, there are significant differences in the needs of representatives of different professions. The paper concludes that mental health workers have different motivations, which can be satisfied by creating appropriate working conditions.

## Keywords

motivation, mental health workers, profession, survey, Croatia

## JEL Classification

M54, I11, J81

## INTRODUCTION

The results of the work of health professionals depend on how well they are motivated (Aduo-Adjei et al., 2016). This means they are driven by certain motives when they come to work and treat people. Psychiatry is no exception, and appropriate motivation for good treatment work is critical. However, when considering the motivations of today's mental health workers, it is crucial to understand state of the art in this field.

Motivation is the process that initiates, guides, and maintains goal-oriented behaviors (Cherry, 2022). In other words, motivation is the study of why individuals behave as they do: What gets their behavior started and what directs, energizes, sustains, and eventually terminates action (Graham & Weiner, 2012). At work, and especially for management, motivation plays a critical role because, in the form of distributing energy to actions, motivation is the only aspect of behavior that people can control. This means any attempt to change behavior must do so through a change in motivation (Kanfer et al., 2008). Hence, management needs to understand what motivates employees and what affects their motivation.

The motivation theory has evolved over a century, starting from Taylor's (1919) rational-economic model of maximizing employees' financial and material rewards. Then Mayo (1922) developed a social model with employees' social needs. Maslow (1954) later suggested a self-actualizing model with a hierarchy of human needs. In contrast to previously developed motivation models, Schein (1980) considered employee nature as the complex with varying needs and motivations depending on the circumstances, age, experience, or expectations. Introducing the concept of a psychological contract, Schein (1980) argued that people at work could be motivated by satisfying security needs, challenging work, and the ability to achieve personal goals. Studying motivation, McClelland (1951) cited the example of a mental health worker, considering the many factors that influence an individual's achievement motive, including a person's actual performance and personal goals. Therefore, the study of mental health workers' motivation should consider different factors.

Considering the recent experience of working in the conditions of the COVID-19 pandemic (Shaikh et al., 2022), various factors can significantly motivate or demotivate medical workers. For example, during the pandemic, due to the increase in mental disorders, the workload on mental health workers increased significantly (Leung et al., 2022). Therefore, they should be more alert and motivated to perform their duties efficiently. Furthermore, considering the numerous cases when medical workers were fired during the pandemic (Ortiga et al., 2022; Fry, 2022), when healthcare lost about 20% of the workforce, including 30% of nurses, just for two years (Poindexter, 2022), it is essential to understand what and how motivates and compels them to remain at their workplaces even during such upheavals.

However, there are many professions in medicine (Kreitzer et al., 2009), so it can be assumed that the motivation of mental health workers differs from the motivation of other medical professionals. Therefore, there is a need to conduct a unique study to understand the nature of the motivation of mental health workers and whether it differs from the motivation of other medical staff in hospitals.

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## 1. LITERATURE REVIEW

When considering the motivation of all health workers, many studies reveal its aspects and differences. Goncharuk (2018) and Goncharuk et al. (2020) found significant differences in the motivation of health workers in different countries. Medical staff in efficient and inefficient healthcare systems has different influencing motivators (Knezevic et al., 2022). Peters et al. (2010) noted a difference in the motivation of health workers in the public and private healthcare sectors. However, all these studies have not divided medical staff into professions.

In recent years, the motivational factors of certain professions of health workers in individual countries have also been studied, e.g., maternal health workers in Somalia (Sheikh & Gele, 2022), health professionals in Ethiopia (Abate et al., 2022), primary health workers in Nigeria (Ajisegiri et al., 2022). However, these and other studies did not compare the motivation of different professions of health workers.

In the scientific literature, very little research investigated the motivation of mental health workers. However, more than half a century ago, Neki (1966) noted intense problems with the motivation of psychiatrists in India. They included: the legacy of old prejudice against this profession; the lack of adequately remunerative employment opportunities and the relatively unremunerated private practice in this profession; the relatively insignificant status of psychiatry in medical education and a hitherto unsympathetic attitude toward psychiatry and mental health of the planners of public health and medical education in the country.

Interesting findings came from Dein et al. (2007), who surveyed 87 psychiatrists in London on their motivation for choosing this profession. They found that psychiatrists were driven mainly by empathy for patients and better working conditions. This means that such factors should be given special attention when studying the motivation of mental health workers.

A recent study on motivation shows severe problems with the motivation of psychiatrists in the Western world. Van Bodegraven (2021), having interviewed 50 independent psychiatrists, concluded that the older generation of psychiatrists is ready to work much longer than the retirement age. However, they need some emotional and practical support.

Moreover, investigating the relationship between motivation and job satisfaction among employees of one of the Nigerian neuropsychiatric hospitals, Sowunmi (2022) found that the motivation of mental health workers is significantly related to gender and occupational status.

Thus, when studying the motivation of mental health workers, it makes sense to pay attention to such factors as age, occupational status, and gender. In addition, the connection with job satisfaction makes it interesting to study motivation and working conditions for health workers. However, the lack of actual comparative publications on the motivation of different professional groups of health workers makes it critical to conduct such a study.

Hence, this study aims to establish the motivators and working conditions of mental health workers and how they differ from the motivators and working conditions of other professionals. The study targets the University Hospital Centre Zagreb – the largest hospital institution in Croatia.

## 2. METHODS

This cross-sectional study was conducted in May 2022 in University Hospital Centre Zagreb in 7 selected departments in the hospital (department for psychiatry, department for microbiology, department for gynecology, department for anesthesiology, intensive care unit for COVID-19, emergency

medicine department – COVID-19 unit, and department for orthopedic surgery). Departments were selected due to their engagement during the COVID-19 pandemic.

Goncharuk (2018) and Goncharuk et al. (2020) proposed a special questionnaire as a tool for the survey. The advantages of this questionnaire are in the thoughtfulness of the set of specific motivators and the presence of separate questions related to the perception of working conditions by the medical staff. However, considering the need for a more detailed clarification of the factors of working conditions perception, the second part of this questionnaire was expanded by a couple of items – “Communication with managers” and “Salary” (Appendix A).

The Ethics committee at University Hospital Centre Zagreb approved the current investigation. Furthermore, the institutional research board gave additional permission to carry out and publish the study results. A questionnaire was prefaced with a letter explaining the study objectives and assuring the respondents of the anonymity and confidentiality of their responses. Participation in the study was voluntary.

During the period of the study, the selected departments employed 517 workers. All medical staff in those clinical departments were invited to participate in the study. Out of the 517 employees, the questionnaires have been printed and distributed among 124 health workers. They completed the questionnaires, giving a response rate of 74% (92/124). Among the 92 surveyed health workers, 76 (82.6%) are females, and 16 (17.4%) are males. The share of mental health workers is 26.1% of the total number of respondents. The characteristics of the sample are presented in Table 1.

**Table 1.** Characteristics of the sample

Departments Professions	Number of observations	Average experience, years	Average work experience in hospital, years	Average age, years
Psychiatry	24	21.9	17.3	47.3
Orthopedic	13	20.8	16.5	41.8
Microbiology	11	15.7	14.9	38.7
Emergency	13	16.8	14.5	38.4
Gynecology	16	26.6	25.4	47.1
Anesthesiology	6	13.7	13.2	41.7
COVID-19 dept	9	5.6	5.1	27.6
Total	92	19.0	16.5	41.9

The questionnaire survey results were subject to statistical testing using the ANOVA (Cuevas et al., 2004) method, which is widely used to detect differences in data groups. The presence of a zero probability (or very close to 0) indicated significant differences between the surveyed groups on the corresponding basis. Gender and, of course, profession, have been tested as features.

Thus, after sequential testing of all motivators for the formed groups, it became possible to realize whether the motivation of mental health workers is different from that of other medical professions, on what grounds, and to what extent.

Since it is impossible to survey all Croatian representatives of the medical profession, the largest hospital center in the country was chosen, in which several specialized departments work.

### 3. RESULTS

Considering the profession (department) as a group factor, the null hypotheses were disproved for 7 of the explored motivators (20), and 4 of the explored working conditions (8). Figure 1a shows that the probabilities of the null hypothesis for each question were close to zero (within the interval 0.0002-0.095) with corresponding high chi-squared.

Figure 1b demonstrates that mental health workers have incredibly high relative motivation by social benefits (SB) and the potential to combine

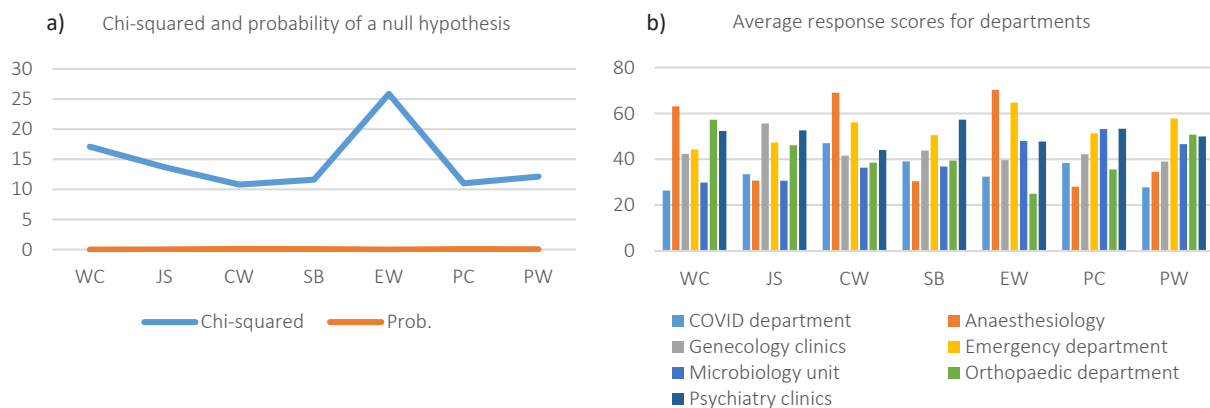
work and family (PC). Among all professions considered, mental health workers have the highest level of these motivators. Besides, they are on the list of the most motivated professionals by working closely with youth (WC), job security (JS), and pleasant working conditions (PW). The other motivators for them are on the medium level.

Among all the motivators of mental health workers, social benefits (SB), the potential to combine work and family (PC), and job security (JS) are the most powerful. All of them are extrinsic. From this, the study can conclude that mental health workers are mainly motivated extrinsically; however, compared with other medical professionals, they are quite well motivated and are leaders in several motivators.

Against the background of other professions, mental health workers look upper-middle motivated (see Figure 1b). However, also striking is the extremely high motivation of anesthesiologists for such motivators as working closely with youth (WC), challenging work (CW), and exciting work (EW) and their poor motivation for the rest of the observed motivators, which indicates the extreme nature of this profession.

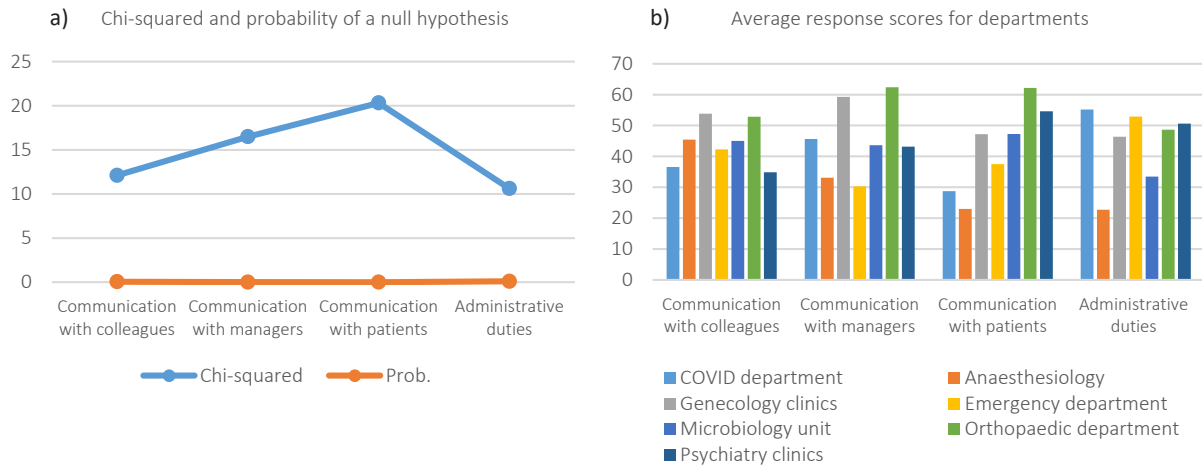
#### 3.1. Work conditions

The results of mental health workers' assessment of working conditions compared with other medical professions are exciting. As seen in Figure 2a, the difference was significant in 4 conditions: communication with colleagues, patients, and managers, as well as administrative duties.



Note: Abbreviations of motivators are disclosed in Appendix A.

**Figure 1.** Significant differences between responses of hospital departments (professions) on motivation



**Figure 2.** Significant differences between responses of hospital departments (professions) on work conditions

As seen in Figure 2b, the perception of working conditions among mental health workers is noticeably worse than the level of motivation. They have the lowest level of satisfaction with communication with colleagues among all the considered medical professions. At the same time, in terms of communication with patients, they are in the lead (second place) along with orthopedists. In addition, they have relatively high satisfaction with administrative duties (third place), while their communication with managers is average. Mental health workers are generally more satisfied with their interactions with patients than with their colleagues.

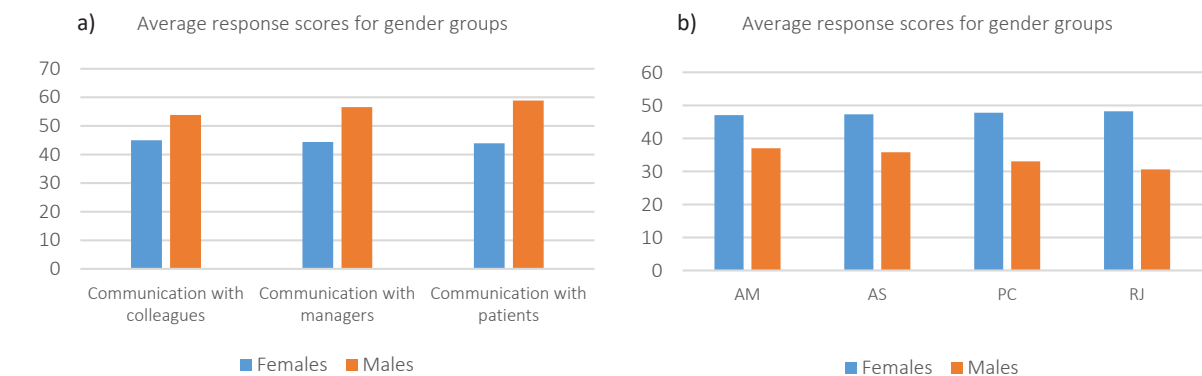
### 3.2. Gender differences

Considering the gender groups' perception of working conditions, only three statistically significant differences were found (Figure 3a): three

types of communication (with colleagues, managers, and patients). Males perceive all of them much better than females.

Moreover, the revealed differences are typical for all professions of Croatian health professionals, including mental health workers. The most significant gender difference was also observed in patient communications (Figure 4a).

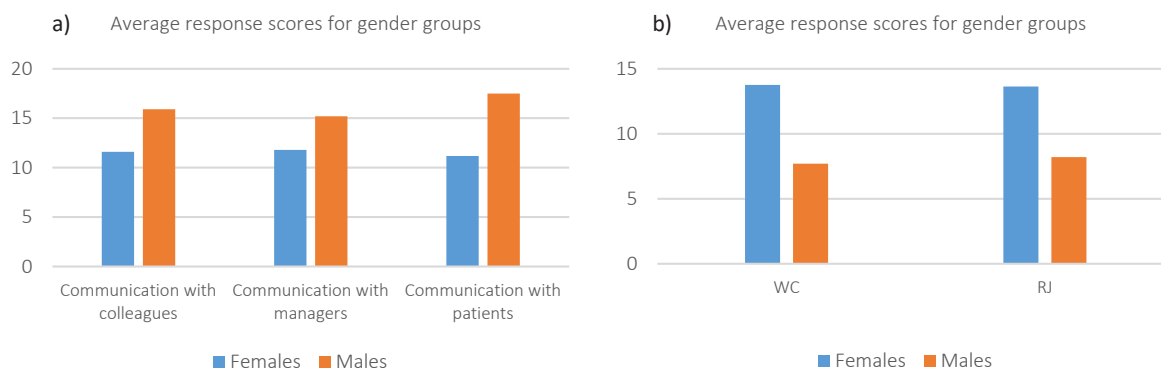
Considering the significant differences in motivation (Figures 3b and 4b), female medical staff in Croatia is significantly more motivated than male one. This is evidenced by all the identified differences by gender in the sample. However, in the whole sample (Figure 3b), women are more motivated by four motivators: altruistic motives/working to help others (AM); ability to make a solid contribution to society (AS); potential to



Note: Abbreviations of motivators are disclosed in Appendix A.

**Figure 3.** Significant differences between responses of gender groups on work conditions and motivation among all the observed medical professions





Note: Abbreviations of motivators are disclosed in Appendix A.

**Figure 4.** Significant differences between responses of gender groups on work conditions and motivation among mental health workers

combine work and family (PC); and responsibility in the job (RJ). On the other hand, among mental health workers (Figure 4b), only two motivators revealed significant differences: working closely with youth (WC) and responsibility in the job (RJ).

This suggests that female healthcare workers are more altruistic and intrinsically motivated than males. However, considering female mental health workers separately, they should be noted as different from other professions since they are not so altruistic and highly motivated by communication with young people and responsible work compared to male mental health workers. On the other hand, all mental health workers in the sample are highly motivated by social benefits (Figure 1b), which confirms the peculiarity of representatives of this profession in comparison with other medical professions.

Comparing the results on motivation and job satisfaction, women are more motivated. However, men are much more satisfied with the working conditions, particularly with three types of communication (with patients, managers, and colleagues). Therefore, females' lower satisfaction may be due to too high job expectations and/or worsened working conditions compared to male workers.

## 4. DISCUSSION

Comparing the results with those previously obtained, one can find confirmation of some

of them, for example, the importance of working conditions for patients noted by Dein et al. (2007) or the particular interest of mental health workers in the social benefits by Neki (1966). They also partly confirmed Grammatikopoulos et al. (2013) in Greece and Lambrou et al. (2010) in Cyprus, who found that mental healthcare professionals tend to be more motivated by intrinsic factors in the workplace.

Looking at job satisfaction, the results complement Fleury et al.'s (2017) Quebec-based findings that there are differences between women's and men's job satisfaction among mental health professionals. As in Quebec, Croatian male mental health workers are more satisfied with their working conditions (see Figure 4); however, as shown in Figure 3, this conclusion is also true for other medical professions surveyed.

Nevertheless, in general, this study is original, and results indicate significant differences between mental health workers from other medical professions, as well as the motivations of male and female mental health workers. These differences suggest assessing whether the current policy on the motivation of mental health workers is correct and whether there is a need to develop specific approaches to improve it, different from other medical professions. Particular attention should be paid to female mental health workers who have increased motivation but are not satisfied with their work conditions.

The limitation of this study is that it is certainly only a particular case of one medical facility.

However, even with such a small example, the assumption about the difference between the motivation of mental health workers and other medical professions was confirmed. Thus, this paper, for the first time, raises the problem of unique motivation and appropriate policy concerning this essential and particular medical profession – the mental health worker.

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## CONCLUSION

The purpose of this study was to determine the motivators and assess the working conditions of mental health workers and how they differ from the motivators and working conditions of other health workers on the example of one of the active medical institutions that include various departments, including psychiatry – University Hospital Centre Zagreb – the largest hospital institution in Croatia.

The study, based on observation of 124 health workers from seven main departments (psychiatry, emergency, microbiology, gynecology, anesthesiology, COVID-19 unit, and orthopedic surgery) in the Zagreb University Hospital Centre, showed that the motivation of mental health workers for several motivators differs significantly from the motivation of other medical professionals. In particular, a significant difference was found for 7 of the 20 motivators examined. Furthermore, mental health workers are more motivated in terms of external motivators, particularly social benefits or job security. This shows that they are passionate not so much about their work but about the bonuses it gives them. However, their perception of working conditions is individual. For example, they are the least satisfied with communication with colleagues and are pretty satisfied with communication with patients and administrative duties.

A deeper look at the profession of a mental health worker through the prism of gender differences revealed some features in their perception of working conditions and motivation. The general trend points to more motivated and, at the same time, less satisfied women. Unlike women, men are delighted with communication with colleagues, patients, and managers. However, men are significantly less motivated, especially regarding responsibility at work and working closely with young people. Considering gender, differences in motivation partially coincide with the general picture for the study sample of medical staff.

The study offers policy implications aimed at differentiating the system of incentives and motivation of medical staff depending on the profession and gender. The case study showed that even in one medical institution, one could find significant differences in the needs of representatives of different professions. Moreover, mental health workers also have different motivations, which must be satisfied by working conditions.

## AUTHOR CONTRIBUTIONS

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Data curation: Anatoliy Goncharuk, Bojana Knezevic.

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## REFERENCES

1. Abate, M., Mulissa, Z., Magge, H., Bitewulign, B., Kiflie, A., Biadgo, A., Alemu, H., Seman, Y., Wolde-senbet, D., Estifanos, A. S., Parry, G., & Quaipe, M. (2022). Key factors influencing motivation among health extension workers and health care professionals in four regions of Ethiopia: A cross-sectional study. *Plos One*, 17(9), e0272551. <https://doi.org/10.1371/journal.pone.0272551>
2. Aduo-Adjei, K., Emmanuel, O., & Forster, O. M. (2016). The impact of motivation on the work performance of health workers (Korle Bu Teaching Hospital): Evidence from Ghana. *Hospital Practices and Research*, 1(2), 47-52. <https://doi.org/10.20286/hpr-010245>
3. Ajisegiri, W. S., Peiris, D., Abimbola, S., Odusanya, O. O., Tesema, A. G., Joshi, R., & Angell, B. (2022). It is not all about salary: A discrete-choice experiment to determine community health workers' motivation for work in Nigeria. *BMJ Global Health*, 7(10), e009718. <http://dx.doi.org/10.1136/bmjgh-2022-009718>
4. Cherry, K. (2022, November 7). *What Is motivation? The driving force behind human actions*. Verywell Mind. Retrieved from <https://www.verywellmind.com/what-is-motivation-2795378>
5. Cuevas, A., Febrero-Bande, M., & Fraiman, R. (2004). An ANOVA test for functional data. *Computational Statistics & Data Analysis*, 47(1), 111-122. <https://doi.org/10.1016/j.csda.2003.10.021>
6. Dein, K., Livingston, G., & Bench, C. (2007). 'Why did I become a psychiatrist?': survey of consultant psychiatrists. *Psychiatric Bulletin*, 31(6), 227-230. <https://doi.org/10.1192/pb.bp.106.012310>
7. Fleury, M. J., Grenier, G., & Bamvita, J. M. (2017). Job satisfaction among mental healthcare professionals: The respective contributions of professional characteristics, team attributes, team processes, and team emergent states. *SAGE Open Medicine*, 5, 2050312117745222. <https://doi.org/10.1177/2050312117745222>
8. Fry, E. T. (2022). Resigned to the great resignation? *Journal of the American College of Cardiology*, 79(24), 2463-2466. <https://doi.org/10.1016/j.jacc.2022.05.004>
9. Goncharuk, A. G. (2018). Exploring a motivation of medical staff. *The International Journal of Health Planning and Management*, 33(4), 1013-1023. <https://doi.org/10.1002/hpm.2555>
10. Goncharuk, A. G., Lewandowski, R., & Cirella, G. T. (2020). Motivators for medical staff with a high gap in healthcare efficiency: Comparative research from Poland and Ukraine. *The International Journal of Health Planning and Management*, 35(6), 1314-1334. <https://doi.org/10.1002/hpm.3037>
11. Graham, S., & Weiner, B. (2012). Motivation: Past, present, and future. In K. R. Harris, S. Graham, T. Urda, C. B. McCormick, G. M. Sinatra, & J. Sweller (Eds.), *APA educational psychology handbook. Theories, constructs, and critical issues* (pp. 367-397). American Psychological Association.
12. Grammatikopoulos, I. A., Koupidis, S. A., Moralis, D., Sadrazamis, A., Athinaiou, D., & Giouzeapas, I. (2013). Job motivation factors and performance incentives as efficient management tools: A study among mental health professionals. *Archives of Hellenic Medicine/Arheia Ellenikes Iatrikes*, 30(1).
13. Kanfer, R., Chen, G., & Pritchard, R. D. (Eds.). (2008). *Work motivation: Past, present and future*. New York: Routledge.
14. Knezevic, B., Lewandowski, R. A., Goncharuk, A., & Vajagic, M. (2022). Studying the impact of human resources on the efficiency of healthcare systems and person-centred Care. In D. Kriksciuniene & V. Sakalauskas (Eds.), *Intelligent Systems for Sustainable Person-Centered Healthcare* (pp. 145-164). Cham: Springer International Publishing. [https://doi.org/10.1007/978-3-030-79353-1\\_8](https://doi.org/10.1007/978-3-030-79353-1_8)
15. Kreitzer, M. J., Kligler, B., & Meeker, W. C. (2009). Health professions education and integrative healthcare. *Explore*, 5(4), 212-227. <https://doi.org/10.1016/j.explore.2009.05.012>
16. Lambrou, P., Kontodimopoulos, N., & Niakas, D. (2010). Motivation and job satisfaction among medical and nursing staff in a Cyprus public general hospital. *Human Resources for Health*, 8(1), 1-9. <https://doi.org/10.1186/1478-4491-8-26>
17. Leung, C. M., Ho, M. K., Bhawanani, A. A., Cogo-Moreira, H., Wang, Y., Chow, M. S., Fan, X., Galea, S., Leung, G. M., & Ni, M. Y. (2022). Mental disorders following COVID-19 and other epidemics: A systematic review and meta-analysis. *Translational Psychiatry*, 12(1), 205. <http://dx.doi.org/10.1038/s41398-022-01946-6>
18. Maslow, A. H. (1954). *Motivation and personality*. New York: Harper.
19. Mayo, E. (1992). *The human problems of an industrial civilization*. Routledge.

20. McClelland, D. C. (1951). Measuring motivation in phantasy: The achievement motive. Groups, leadership and men; research in human relations. In H. Guetskow (Ed.), *Groups, Leadership and Men: Research in Human Relations* (pp. 191-205). Pittsburgh: Carnegie Press. Retrieved from <https://books.google.no/books?id=DGjQAAAAMAAJ&dq>
21. Neki, J. S. (1966). Problems of motivation affecting the psychiatrist, the general practitioner and the public in their interactions in the field of mental health. *Indian Journal of Psychiatry*, 8(2), 117-126.
22. Ortiga, Y. Y., Diño, M. J., & Macabasag, R. L. A. (2022). Clocking out: Nurses refusing to work in a time of pandemic. *Social Science & Medicine*, 305, 115114. <https://doi.org/10.1016%2Fj.socscimed.2022.115114>
23. Peters, D. H., Chakraborty, S., Mahapatra, P., & Steinhardt, L. (2010). Job satisfaction and motivation of health workers in public and private sectors: Cross-sectional analysis from two Indian states. *Human Resources for Health*, 8, 27. <https://doi.org/10.1186/1478-4491-8-27>
24. Poindexter, K. (2022). The great resignation in health care and academia: Rebuilding the postpandemic nursing workforce. *Nursing Education Perspectives*, 43(4), 207-208. <https://doi.org/10.1097/01.nep.0000000000001003>
25. Schein, E. H. (1980). *Organisational psychology*. Englewood Cliffs, NJ: Prentice-Hall.
26. Shaikh, D., Kamarudin, S., Rizal, A. M., & Shoaib, H. M. (2022). Willingness of healthcare workers to treat COVID-19 patients during the pandemic: Extended theory of planned behavior. *Problems and Perspectives in Management*, 20(4), 210-223. [http://dx.doi.org/10.21511/ppm.20\(4\).2022.16](http://dx.doi.org/10.21511/ppm.20(4).2022.16)
27. Sheikh, N. S., & Gele, A. (2022). Factors influencing the motivation of maternal health workers in conflict setting of Mogadishu, Somalia. *medRxiv*, 2022-01. <https://doi.org/10.1101/2022.01.10.22268888>
28. Sowunmi, O. A. (2022). Job satisfaction, personality traits, and its impact on motivation among mental health workers. *South African Journal of Psychiatry*, 28, 1801. <https://doi.org/10.4102/saj-psychiatry.v28i0.1801>
29. Taylor, F. W. (1919). *The principles of scientific management*. Harper & Brothers.
30. van Bodegraven, E. (2021). The spirit and motivation of the for long working psychiatrist. *Tijdschrift Voor Psychiatrie*, 63(7), 565-569. Retrieved from <https://euro-pepmc.org/article/med/34523709>

## APPENDIX A

**Table A1.** Medical staff questionnaire on motivation and working conditions

Source: Goncharuk (2018), Goncharuk et al. (2020).

What motivates you at your workplace?							
No.	Motives		Levels of evaluation				
			1 no effect	2 weak	3 medium	4 important	5 very important
1	Altruistic motives/Working to help others	AM					
2	Interesting work	IW					
3	Working closely with youth (interns, etc.)	WC					
4	Job security	JS					
5	Challenging work	CW					
6	Social benefits	SB					
7	Ability to make a solid contribution to society	AS					
8	Opportunities for travel (mobility)	OT					
9	Exciting work	EW					
10	Community respect for your occupation	CR					
11	Potential to combine work and family	PC					
12	Flexible hours of work	FH					
13	Awards and recognition	AR					
14	Opportunities for promotion/advancement	OP					
15	Responsibility in job	RJ					
16	Pleasant working conditions	PW					
17	Professional prestige/High status	PP					
18	Salary/Future earnings potential	S					
19	Opportunities for creativity and originality	OC					
20	Demand for the profession/Job opportunities	JO					
How do you evaluate your working conditions <sup>1</sup> by type?							
No.	Type of work		Levels of evaluation				
			1 very bad	2 bad	3 modest	4 good	5 excellent
1	Professional duties						
2	Job security						
3	Communication with colleagues						
4	Communication with managers						
5	Communication with patients						
6	Professional development						
7	Administrative duties (optional)						
8	Salary						

*Note:* 1 - Refers to whether the individual feels they have enough time, resources, technical conditions, and institutional support.