Eur J Transl Myol 32 (2): 10637, 2022 doi: 10.4081/ejtm.2022.10637

Satisfaction of outpatient oncologists with their work

Liudmila I. Moskvicheva (1), Sergey V. Russkikh (2,3), Ekaterina V. Makarova (2,4), Elena A Tarasenko (5), Mikhail D Vasiliev (2), Alina B. Timurzieva (2)

(1) Ultrasound Diagnostic Department, P. Hertsen Moscow Oncology Research Institute — branch of the National Medical Research Radiological Center of the Ministry of Health of the Russian Federation, Moscow Russia; (2) N.A. Semashko National Research Institute of Public Health, Moscow Russia; (3) Department of Theory and Practice of Public Administration, National Research University Higher School of Economics, Moscow, Russia; (4) Research Laboratory "Health Technology Assessment and Clinical and Economic Expertise" A.I. Yevdokimov Moscow State University of Medicine and Dentistry, Moscow, Russia; (5) Department of Health Management and Economics, National Research University Higher School of Economics, Moscow, Russia.

This article is distributed under the terms of the Creative Commons Attribution Noncommercial License (CC BY-NC 4.0) which permits any noncommercial use, distribution, and reproduction in any medium, provided the original author(s) and source are credited.

Abstract

Job satisfaction is a fundamental ingredient in the life quality of a modern person; for a health care worker, it determines to a large extent the quality and accessibility of health care services they provide. Our aim is identification of key reasons for low job satisfaction among outpatient oncologists at cancer care centres (CCC) and identification of the best ways to address them. 110 oncologists working in outpatient CCC in Moscow, Moscow region and Ivanovo region participated in this research. Respondents' job satisfaction was assessed using V.A. Rozanova's Job Satisfaction Assessment Questionnaire. Virtually a quarter (23.6%) of oncologists were dissatisfied with their work; male respondents and surgical employees reported significantly higher levels of dissatisfaction. Wage levels and equity, working hours, teamwork and coordination in carrying out collective tasks and managerial style were the main areas of dissatisfaction. Measures to improve the work process included enhancing the resource outfit, fair consideration of each employee's achievements when distributing incentives, clear allocation of responsibility for collective project tasks, creating opportunities for paid part-time work and arranging regular meals at the expense of the health care organisation. Raising managers' awareness of the results can contribute to improvements in oncologists' performance, work process satisfaction, productivity and performance, quality of care and access to it, as well as public satisfaction and confidence in the health-care system as a whole.

Key Words: Job satisfaction; outpatient care; oncology; health care system.

Eur J Transl Myol 32 (2): 10637, 2022 doi: 10.4081/ejtm.2022.10637

Currently, the Russian Federation is intensively implementing the national health-care project, whose most important tasks aim to improve access to medical care and the quality of medical services, develop high-technology diagnostic techniques and disease treatment, boost the sector's human resources and achieve maximum staffing levels in medical institutions at various levels with doctors, nurses and paramedical staff. Increased motivation, satisfaction, and psychoemotional well-being of health-care workers should definitely be considered as the basis for achieving these goals. This can contribute to the retention of existing staff and the influx of younger staff, increase staff

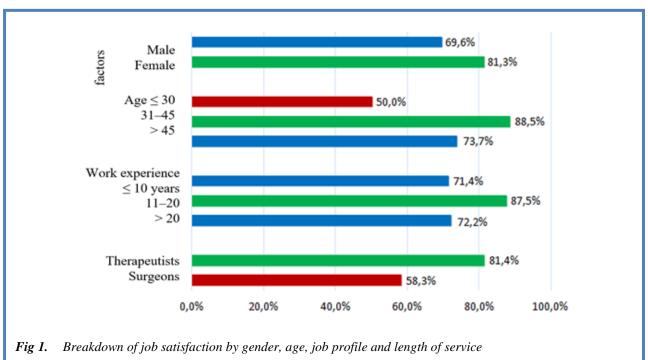
capacity, improve the quality of services provided and the accessibility of health care. Satisfaction is nowadays understood as the psychological state of contentment that occurs when the result obtained coincides with the expected one or exceeds it, as well as when the subject's aspirations and desires and basic needs are fulfilled. Work satisfaction is a critical component of modern people's quality of life. Job satisfaction for the healthcare worker largely determines the quality of their professional performance. It also contributes to the demographic distribution of professionals and healthcare affordability. Many studies, both at home and abroad, demonstrate the

Eur J Transl Myol 32 (2): 10637, 2022 doi: 10.4081/ejtm.2022.10637

problem of poor job satisfaction among doctors and nursing staff. According to Rosta J. et al (2019)⁸ work satisfaction among Norwegian doctors tends to decrease when compared in 2010 and 2017. However, the phenomenon is more prevalent among therapeutists and specialists in state institutions.8 Job satisfaction with Chinese doctors also demonstrated a relatively low level, with an average score of 19.61 out of 30. The authors demonstrated the negative impact of life/work conflict and the positive impact of a psychologically physician-patient relationship positive on satisfaction.9 According to a sociological study by Domagała A. (2018)¹⁰ involving 1,003 doctors in Poland, only 56.6% of respondents were satisfied with their jobs. The age of the respondents and their length of service had a positive correlation with their overall job satisfaction. Female specialists were 0.27 times less satisfied with their jobs compared to their male colleagues; respondents working in specialised and university hospitals reported higher satisfaction than those working in community hospitals. 10 Miao Y. et al. (2017)¹¹ also noted gender differences in job satisfaction when assessing this indicator in rural western China.¹¹ Professional burnout, heavy workload, professional development and career progression along with an opaque or unfair pay system are now considered to be the major causes of low satisfaction among doctors worldwide. 12-16 In our country, job satisfaction is noted by 54.3% of therapeutists, 60-80% of neurologists (depending on the age group), and 62% of oncologists. 17-19 Over half (59%) of pathologists with 1-15 years' work experience have been dissatisfied with career progression, 47% have been dissatisfied with

salary and fringe benefits and 29% have been dissatisfied with management relations.²⁰ Major factors reducing doctors' job satisfaction are as follows: resource shortage of units, workday duration over 9 hours, lack of rest and meal breaks, lengthy medical paperwork at outpatient appointments, low wages, lack of patient commitment to treatment and responsibility for maintaining their own wellbeing, negative public attitude towards the medical profession. 17,18,21,22 According to Volnukhin A.V. and Siburina T.A. (2021),²³ inadequate use of the professional capacity of medical and managerial staff is mainly due to the rigid regulation and formalisation of work and the lack of conditions (technical, organisational, and financial) for exercising the knowledge, skills, and abilities available. For heads of functional departments, additional factors are management's disinterest in proactive employees, as well as legal barriers to innovative development. Apart from the above-mentioned problems, doctors also note workloads and an underestimation management of the capabilities and desires employees.²³ Medical oncology is one of the most honourable healthcare professions. It is associated with the highest levels of stress, responsibility, and workload, and therefore overall job satisfaction among oncologists is generally not high.²⁴ Previously, job satisfaction has been widely studied among US, Chinese, and European oncologists;^{25–27} however, there have been no studies on job satisfaction among Russian outpatient oncologists, which explains the relevance of this study.

In this study, we define job satisfaction as a combination of actual work satisfaction (content and organisational conditions) and such attributes as salary



Eur J Transl Myol 32 (2): 10637, 2022 doi: 10.4081/ejtm.2022.10637

Table 1. Breakdown of respondents according to their satisfaction with different aspects of the work process

Work aspects	Degree of satisfaction by percentage of consenting respondents (%)				
	1	2	3	4	5
Organisation you are employed with	34.5	29.1	27.3	9.1	0
Physical working conditions (heat, cold, noise)	38.2	34.5	18.2	5.5	3.6
The job of a doctor itself	34.5	40.0	16.4	7.3	1.8
Consistency in the empoloyees' performance	34.5	29.1	20.0	9.1	7.3
Your manager's leadership style	40.0	29.1	14.5	9.1	7.3
Professional competence of your supervisor	47.3	36.4	9.1	3.6	3.6
Wage in terms of matching your workload	10.9	30.9	32.7	14.6	10.9
Wages relative to what other companies pay for the same work	10.9	40.4	16.4	23.6	9.1
Professional development	16.4	56.4	16.4	7.3	3.6
Career opportunities	14.5	49.1	21.8	10.9	3.6
Extent to which you use your own experience and abilities	25.5	47.3	20.0	7.3	0
Job requirements for intellectual qualities	16.4	47.3	23.6	10.9	1.8
Length of working day	25.5	23.6	21.8	18.2	10.9

Notes: 1 - quite satisfied; 2 - satisfied; 3 - not quite satisfied; 4 - not satisfied; 5 - extremely dissatisfied

level, psychological climate in the team, opportunities for career growth and professional development, effectiveness of communication process, managerial style, etc.²⁸

Our aim is stimation of job satisfaction in clinical oncologists, who works in the CCC for outpatient oncological care by assessing the degree of satisfaction among outpatient oncologists in cancer centres with their work and its individual components, identifiyng major risk factors and ways of increasing job satisfaction amongst professionals.

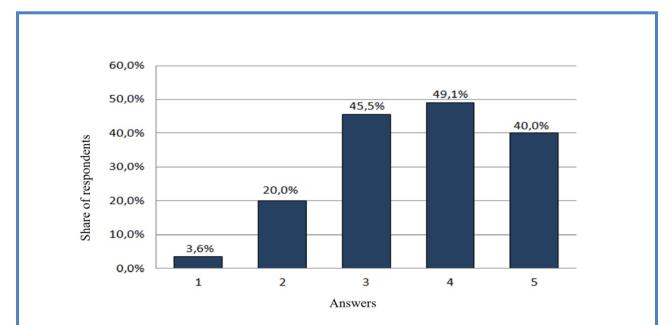


Fig 2. Breakdown of answers of respondents in both groups to the question "What activities/measures would you consider effective to alleviate the level of stress in the workplace?"

Notes: 1: shift from dictatorial to collegial management; 2: ability to optimise the work schedule for each employee; 3: objective accounting of the achievements of each employee when allocating incentives; 4: improvement of resource outfit of the unit; 5: clear responsibility allocation in performing collective project tasks.

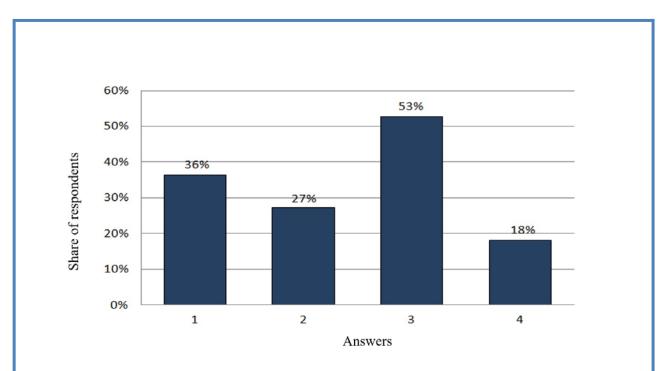


Fig 3. Breakdown of the answers provided by the respondents in both groups to the question "Which changes would enhance your enjoyment of work?"

Notes: 1: arranging regular meals at the expense of the health care organization; 2: creation of a staff lounge; 3: creating opportunities for paid part-time work; 4: annual "Best Employee" awards by management.

Materials and Methods

110 oncologists (64 women and 46 men) working in outpatient CCC in Moscow, Moscow region and Ivanovo region participated in this research. Average age of specialists was 42.1 years (27–72 years range) and the average length of service as a doctor was 16.2 years (1-44 years range). 78.2% (86/110) of specialists were employed in therapeutic units and 21.8% (24/110) in surgical units. Analytical, sociological (survey and questionnaire), and statistical research techniques were applied. Respondents' job satisfaction was assessed using V. A. Rozanova's Job Satisfaction Assessment Questionnaire.²⁸ Statistical analysis was conducted using Statistica 10 software; descriptive statistics methods, Student's t-test for intergroup comparisons and Spearman's rank correlation coefficient were used in data processing. The threshold for statistical significance was set at $\alpha < 0.05$

Results

When assessing the overall level of job satisfaction, 23.6% (26/110) of respondents reported their dissatisfaction; 1.8% (2/110) of doctors were extremely dissatisfied with their work process and 18.2% (20/110) were completely satisfied. 76.4% (84/110) of doctors were satisfied with their performance, mostly female, therapeutists, specialists aged between 31 and 45 years

and specialists with 11–20 years of work experience (Figure 1).

In terms of analysing respondents' satisfaction with various components of the work process, the majority of respondents were dissatisfied or extremely dissatisfied with wages compared to those paid for the same work in other companies (32.7%, 36/110), work duration (29.1%, 32/110), wages in relation to work effort (25.5%, 28/110), employee co-ordination (16.4%, 18/110) and managerial style (16.4%, 18/110). Furthermore, doctors reported a higher degree of satisfaction with the professional competence of their superior (83.7%, 92/110), the medical profession itself (74.5%, 82/110), opportunities for professional development (72.8%, 80/110), the extent to which they make use of their own experience and abilities (72.8%, 80/110), and physical working conditions (72.8%, 80/110) (Table 1).

A regression correlation analysis indicated no statistically significant relationship between overall job satisfaction, satisfaction with individual job components, respondent's age and years of service (r = -0.1-0.1, p = 0.44-0.99). However, male staff were statistically significantly less satisfied with the overall work process (p = 0.031), medical institution (p = 0.018), profession (p = 0.007), supervisor leadership

Satisfaction of outpatient oncologists Eur J Transl Myol 32 (2): 10637, 2022 doi: 10.4081/ejtm.2022.10637

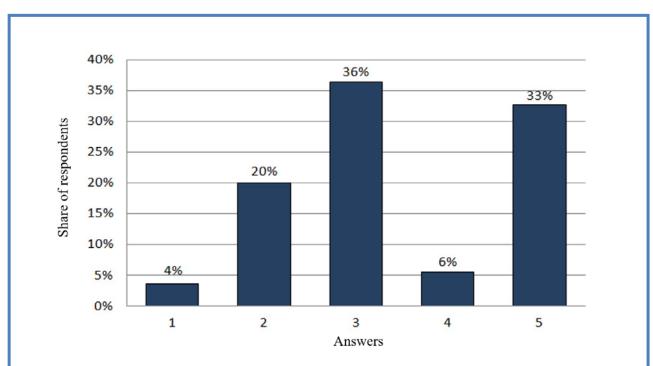


Fig 4. Breakdown of answers provided by respondents in both groups to the question "What do you lack most in your daily work duties?"

Notes: 1: the opportunity to contact your direct supervisor; 2: understanding of the nature of the task; 3: adequate working time to perform minimum scope of work; 4: quiet, peaceful environment at work; 5: communication with employees in other units on work-related issues..

style (p = 0.034) and professional competence (p < 0.001) compared to female doctors, while surgical staff demonstrated significantly lower levels of job satisfaction (p = 0.051), teamwork coordination (p =0.003) and supervisor management style (p = 0.014) compared to therapeutists.

This study also identified key organisational changes believed to reduce overall workplace stress levels and improve job satisfaction amongst the oncologists who took part in the study.

As measures to reduce work stress levels, the need for better resource outfit of the unit, objective accounting of the achievements of each employee when allocating incentive payments, and clear responsibility allocation when performing collective project tasks were mentioned by the greatest number of respondents (Figure 2).

Major improvements that respondents suggested would increase their level of job satisfaction included the possibility of paid part-time work and regular meals at the institution's expense (Figure 3). The following additional measures were noted by doctors: enhanced quality of the electronic health card system; improved distribution of paperwork between doctors and nurses; not working on weekends and public holidays.

According to the specialists, the main shortcomings of the work process include inadequate working time to

minimum scope of work, lack perform communication with staff in other departments on workrelated issues and lack of understanding of the task at hand (Figure 4). Further noted were the lack of an assistant and/or resident physician, as well as the lack of time to complete medical records.

Discussion

This study shows that almost a quarter (23.6%) of clinical oncologists in CCC are dissatisfied with their work. This is more common (but not statistically significant) among young professionals, most likely due to the difficult period of adaptation in the workplace, the low level of pay, the expressed ambitions for professional growth coupled with limited opportunities for individualisation of training and development programmes in healthcare organisations. Male respondents, as compared to female oncologists, were statistically significantly less satisfied with the overall work process, the medical institution wherein they carry out their work function, their occupation, and their supervisor's managerial style and professional competence. These tendencies may also be due to perceived underpayment, inability to realise full potential, as well as due to barriers to career were advancement. Surgical staff statistically significantly less satisfied with their work when compared to therapeutists, which may indicate poor

Eur J Transl Myol 32 (2): 10637, 2022 doi: 10.4081/ejtm.2022.10637

opportunities to implement manual skills of surgical oncologists in the outpatient setting. Employees in the surgical field, however, demonstrated significantly lower levels of satisfaction with teamwork and managerial style. This may be attributed to lack of softskills development among employees, lack of communication between departments and specialists, ineffective distribution of tasks and responsibilities during project activities, and limited managerial templates applied. In terms of this study, wage levels and equity, working hours, teamwork and coordination in carrying out collective tasks and managerial style were the main areas of dissatisfaction. Most apparent workflow shortcomings identified by experts were insufficient working hours to carry out the minimum scope of work, difficulties in communication between staff in different departments, lack of understanding of the nature of the task set by management, lack of an assistant and/or resident physician, as well as the lack of time to complete medical records. The problems indicate inadequate remuneration system in CCC, inefficient workflow in the units due to lack of required organisational and human resources management skills demonstrated by managers, inadequate development of internal communication channels. Respondents identified the following measures to optimise the work process of functional specialists: improving the resource outfit of units, objective accounting of the achievements of each employee when allocating incentive payments, clear responsibility allocation when performing collective project tasks, creating opportunities for paid part-time work, arranging regular meals at the expense of the health care organisation, enhanced quality of the electronic health card system, improved distribution of paperwork between doctors and nurses, and absence of work on weekends and public holidays. Raising CCC managers' awareness of the results can contribute to improvements in oncologists' performance, workplace satisfaction, productivity and performance, quality of care and access to it, as well as public satisfaction and confidence in the health-care system as a whole.

List of acronyms

CCC - cancer care centres

Contributions of Authors

MLI, study design development; data collection, analysis, and interpretation; writing the article. RSV, study design development; data collection and interpretation; editing the article. MEV, study design development; statistical data processing. TEA, study design development; scientific advice; editing the article. VMD, scientific advice; editing the article. TAB, scientific advice; editing the article.

Acknowledgments

The Authors thank colleagues of the Department of Neurosciences, University of Padova, Italy and of the A&C M-C Foundation for Translational Myology, Padova, Italy for discussions and critical readings.

Funding

The study received no external funding.

Conflict of Interest

The authors have no conflicts of interest to declare that are relevant to the content of this article.

Ethical Publication Statements

We confirm that we have read the journal's position on ethical issues involved in publication and affirm that this report is consistent with those guidelines.

Corresponding Author

Ekaterina V Makarova, PhD, N.A. Semashko National Research Institute of Public Health, 105064, Vorontsovo Pole str. 12-1, Moscow Russia and Research Laboratory "Health Technology Assessment and Clinical and Economic Expertise" A.I. Yevdokimov Moscow State University of Medicine and Dentistry, 127473, Delegatskaya str. 1-20, Moscow, Russia. Tel.: +7(915) 111-41-37

ORCID: 0000-0003-3767-8475 E-mail: baudolinoo@gmail.com.

E-mails and ORCID iD of co-authors

Liudmila I. Moskvicheva: <u>ludamed16@mail.ru</u>

ORCID iD: 0000-0002-5750-8492 Sergey V. Russkikh: russkikh1@mail.ru ORCID iD: 0000-0002-3292-1424 Elena A Tarasenko: etarasenko@hse.ru ORCID iD: 0000-0001-5070-1735 Mikhail D Vasiliev: m.vasilev@nriph.ru ORCID iD: 0000-0003-1646-7345

Alina B. Timurzieva: alinko9977z@mail.ru

ORCID iD: 0000-0003-1817-3228

References

- Moskvicheva LI. [The role of various types of stimulation in the work motivation of a doctor]. Upravlenie personalom i intellektual'nymi resursami v Rossii. 2019;8(3):39-43. Russian. doi: 10.12737/article_5d1d d6874.23192347
- Kokorin VG, Kukovyakin SA, Sheshunov IV, Kukovyakina ND. [Satisfaction with medical care (literature review)]. Vyatka Medical Bulletin. 2009;2-4:69-77. Russian.
- Zhuravlev AL, Barabanshchikov AN, Volovikova MI. [Human psychology in the modern world]. Vserossiiskoi yubileinoi nauchnoi konferentsii, posvyashchennoi 120-letiyu so dnya rozhdeniya S.L. Rubinshteina, Izd-vo «Institut psikhologii RAN». 2009. pp.137-146. Russian.
- Mahmood JI, Grotmol KS, Tesli M, Moum T, Andreassen O, Tyssen R. Life satisfaction in Norwegian medical doctors: a 15-year longitudinal study of work-related predictors. BMC Health

Eur J Transl Myol 32 (2): 10637, 2022 doi: 10.4081/ejtm.2022.10637

- Serv Res. 2019 Oct 22;19(1):729. doi: 10.1186/s12913-019-4599-7
- Lu Y, Hu XM, Huang XL, Zhuang XD, Guo P, Feng LF, Hu W, Chen L, Zou H, Hao YT. The relationship between job satisfaction, work stress, work-family conflict, and turnover intention among physicians in Guangdong, China: a crosssectional study. BMJ Open. 2017 May 12;7(5):e014894. doi: 10.1136/bmjopen-2016-014894
- Kim MK, Arsenault C, Atuyambe LM, Kruk ME. Predictors of job satisfaction and intention to stay in the job among health-care providers in Uganda and Zambia. Int J Qual Health Care. 2021 Sep 29;33(3):mzab128. doi: 10.1093/intqhc/mzab128
- Zhang X, Bian L, Bai X, Kong D, Liu L, Chen Q, Li N. The influence of job satisfaction, resilience and work engagement on turnover intention among village doctors in China: a cross-sectional study. BMC Health Serv Res. 2020 Apr 6;20(1):283. doi: 10.1186/s12913-020-05154-0
- 8. Rosta J, Aasland OG, Nylenna M. Changes in job satisfaction among doctors in Norway from 2010 to 2017: a study based on repeated surveys. BMJ Open. 2019 Sep 8;9(9):e027891. doi: 10.1136/bmjopen-2018-027891
- Deng S, Yang N, Li S, Wang W, Yan H, Li H. Doctors' Job Satisfaction and Its Relationships With Doctor-Patient Relationship and Work-Family Conflict in China: A Structural Equation Modeling. Inquiry. 2018 Jan-Dec;55:469580 18790831. doi: 10.1177/00469580 18790831
- Domagała A, Peña-Sánchez JN, Dubas-Jakóbczyk K. Satisfaction of Physicians Working in Polish Hospitals-A Cross-Sectional Study. Int J Environ Res Public Health. 2018 Nov 25;15(12):2640. doi: 10.3390/ijerph15122640
- 11. Miao Y, Li L, Bian Y. Gender differences in job quality and job satisfaction among doctors in rural western China. BMC Health Serv Res. 2017 Dec 28;17(1):848. doi: 10.1186/s12913-017-2786-y
- 12. Degen L, Linden K, Seifried-Dübon T, Werners B, Grot M, Rind E, Pieper C, Eilerts AL, Schroeder V, Kasten S, Schmidt M, Goebel J, Rieger MA, Weltermann BM, On Behalf Of The IMPROVEjob Consortium. Job Satisfaction and Chronic Stress of General Practitioners and Their Teams: Baseline Data of a Cluster-Randomised Trial (IMPROVEjob). Int J Environ Res Public Health. 2021 Sep 8;18(18):9458. doi: 10.3390/ijerph 18189458
- 13. Collins A, Beauregard A. The effect of breaches of the psychological contract on the job satisfaction and wellbeing of doctors in Ireland: a quantitative study. Hum Resour Health. 2020 Nov 12;18(1):89. doi: 10.1186/s12960-020-00534-3
- 14. Alrawashdeh HM, Al-Tammemi AB, Alzawahreh MK, Al-Tamimi A, Elkholy M, Al Sarireh F,

- Abusamak M, Elehamer NMK, Malkawi A, Al-Dolat W, Abu-Ismail L, Al-Far A, Ghoul I. Occupational burnout and job satisfaction among physicians in times of COVID-19 crisis: a convergent parallel mixed-method study. BMC Public Health. 2021 Apr 28;21(1):811. doi: 10.1186/s12889-021-10897-4
- Zhang SX, Liu J, Afshar Jahanshahi A, Nawaser K, Yousefi A, Li J, Sun S. At the height of the storm: Healthcare staff's health conditions and job satisfaction and their associated predictors during the epidemic peak of COVID-19. Brain Behav Immun. 2020 Jul;87:144-146. doi: 10.1016/j.bbi.2020.05.010
- 16. Ab Rahman N, Husin M, Dahian K, Mohamad Noh K, Atun R, Sivasampu S. Job satisfaction of public and private primary care physicians in Malaysia: analysis of findings from QUALICO-PC. Hum Resour Health. 2019 Nov 4;17(1):82. doi: 10.1186/s12960-019-0410-4
- 17. Aldabergenova GA. [Social aspects and satisfaction of internists with working conditions at the polyclinic level]. Onkologiya XXI vek. 2019:16-18. Russian
- 18. Pleshkova OL, Mukhametgareeva LA, Mironova EV, Shkatova EY. [Satisfaction of neurologists with their professional activities]. Modern science. 2021:1-1: 398-402. Russian.
- 19. Moskvicheva LI. [The syndrome of professional emotional burnout in oncological service doctors: the prevalence and severity of the syndrome, factors affecting its development]. Menedzher zdravookhraneniya. 2020;6:28-36. Russian.
- Ushakova MYu, Kora NA. [Job satisfaction as a factor of psychological health in the professional activity of pathologists]. Politika i pravo. 2021:86-92. Russian. doi: 10.22250/PAL.2021.12
- 21. Zhuzenova MA. [Results of a survey on the quality of resource availability and job satisfaction of endocrinologists in providing care to patients with type 2 diabetes in polyclinics in Almaty. Science and education: Problems and Innovations: sbornik statei V Mezhdunarodnoi nauchno-prakticheskoi konferentsii Penza: MTsNS «Nauka i Prosveshchenie». 2020. pp. 218-223. Russian.
- 22. Danilchenko YaV, Karas DV, Popsuiko AN, Artamonova GV. [Satisfaction of medical personnel patient satisfaction with the quality of care: is there a connection?] Sotsial'nye aspekty zdorov'ya naseleniya. 2020;66(3):2. Russian. doi: 10.21045/2071-5021-2020-66-3-2
- Volnukhin AV, Siburina TA. [Management of professional and personal potential of medical personnel]. Problemy sotsial'noi gigieny, zdravookhraneniya i istorii meditsiny. 2021;29(1):147-152. Russian. doi: 10.32687/0869-866X-2021-29-1-147-152

Eur J Transl Myol 32 (2): 10637, 2022 doi: 10.4081/ejtm.2022.10637

- 24. Braun M, Naor L, Hasson-Ohayon I, Goldzweig G. Oncologists' Locus of Control, Compassion Fatigue, Compassion Satisfaction, and the Mediating Role of Helplessness. Curr Oncol. 2022;29:1634–1644. doi: 10.3390/curronco 129030137
- Shanafelt TD, Gradishar WJ, Kosty M, Satele D, Chew H, Horn L, Clark B, Hanley AE, Chu Q, Pippen J, Sloan J, Raymond M. Burnout and career satisfaction among US oncologists. J Clin Oncol. 2014 Mar 1;32(7):678-86. doi: 10.1200/JCO.2013.51.8480. Epub 2014 Jan 27. J Clin Oncol. 2014;32(7):678-686. doi: 10.1200/JCO.2013.51.8480
- Corrigan L, O'Leary C, Kroes J, Farooq AR, Horgan A, Calvert P, O'Connor M. Professional burnout, work patterns and career satisfaction in medical oncologists in Ireland. Ir J Med Sci. 2020

- May;189(2):711-718. doi: 10.1007/s11845-019-02088-3
- 27 Ma S, Huang Y, Yang Y, Ma Y, Zhou T, Zhao H, Chen L, Zhou N, Zhang L. Prevalence of Burnout and Career Satisfaction Among Oncologists in China: A National Survey. Oncologist. 2019 Jul;24(7):e480-e489. doi: 10.1634/theoncologist. 2018-0249
- Suntsova YaS, Kozhevnikova OV. [Diagnostics of professional formation of personality: educational and methodical manual. Part 3]. Izhevsk: Izdatel'stvo «Udmurtskii universitet». 2012. Pp. 38-68. Russian.

Submission: May 24, 2022 Revision received: June 01, 2022 Accepted for publication: June 02, 2022