

CASE STUDY

Managing absenteeism among pregnant healthcare workers: A case from Croatia's Clinical Hospital Centre Rijeka

Hrvoje Lalić*

Occupational and Sports Medicine, Health Centre Rijeka and Medical Faculty Rijeka, Rijeka, Croatia

Received: January 31, 2025

Accepted: April 26, 2025

Online Published: May 12, 2025

DOI: 10.63564/jha.v14n1p42

URL: <https://doi.org/10.63564/jha.v14n1p42>

ABSTRACT

Objective: The case aimed to highlight the increasing absenteeism among pregnant medical workers employed at the Clinical Hospital Centre Rijeka, Croatia. The paper proposed and implemented measures to reduce this trend through coordinated efforts involving the contracted outpatient Occupational Medicine, the Hospital Personnel Department, and the Occupational Safety Department.

Methods: A descriptive approach was used to assess the current state of pregnancy-related absenteeism, which fluctuated up to 3% annually of the total 3,500 hospital employees, of whom 81% were females.

Results: Immediate action by contracted outpatient Occupational Medicine introduced a selective approach to granting temporary incapacity leave only when the workplace posed a genuine threat to maternal and fetal health. In collaboration with the Occupational Safety Department, temporary reassignment to less hazardous roles was implemented, minimizing absenteeism.

Conclusions: The implementation of governmental measures in March 2025, granting significant benefits to pregnant employees, risked straining hospital operations, possibly leading to department closures given the female-dominated workforce. Adhering to Occupational Medicine evaluations and strategically reassigning pregnant workers helped mitigate these risks.

Key Words: Occupational medicine, Pregnant hospital workers, Workplace management

1. INTRODUCTION

Nowadays, there are more and more women in medicine, which is already evident in medical faculties, where the number of male students is steadily decreasing. The same is true in the workplace, in hospital centres, and even in health clinics. In the Republic of Croatia, which has fewer than 4 million inhabitants and more deaths than births, the government has decided to implement incentive measures to improve the demographic situation of the country. This, however, does not favor hospital management, which is struggling to find healthcare personnel to maintain the operations

of its institutions. After a young resident “discovered” the Regulation on the Rights to Maternity Leave for Pregnant Workers,^[1] which has been in place since 2011, a “wave” of young female healthcare workers seeking such leave was initiated, in both justified and unjustified cases. It is true that hospitals operate in shifts, with extended working hours and night shifts, which can negatively affect pregnancy in various ways.^[2,3] Premature births, miscarriages, low birth weight, stillbirths, preeclampsia, and eclampsia have been described. On the other hand, such work brings significant financial benefits, especially the pay for night shifts and overtime.^[4] Shift

***Correspondence:** Hrvoje Lalić; Email: hlalic@inet.hr; Address: Occupational and Sports Medicine, Health Centre Rijeka and Medical Faculty Rijeka, Rijeka, Croatia.

work and disruption of sleep patterns can lead to gestational diabetes mellitus (GDM) and spontaneous miscarriages.^[5,6] In general, considering the pregnancy outcomes and work conditions, female healthcare workers and laboratory staff are most concerned due to exposure to solvents, anaesthetic gases, formaldehyde, and ionizing radiation.^[7] Nurses are concerned about their pregnancies due to exposure to fetotoxic and teratogenic effects on various work sites.^[8] The more risk factors present in the workplace, the greater the tendency toward absenteeism.^[9]

This case presents the problems of increased pressure from pregnant healthcare workers on the management of the Clinical Hospital Centre Rijeka to grant sick leave, which is paid at 100% of the salary, as is the case for professional illnesses and work-related injuries.

2. EXAMINEES AND METHODS

The Clinical Hospital Centre Rijeka employs around 3,500 staff, of whom 81% are women. Young women, with an average age of 31 (range 31-41), increasingly request 100% paid

sick leave due to pregnancy, most often in the 8th week of pregnancy (range 5-25), attaching gynecologist reports recommending rest. Annually, nearly 3% of employed women request such sick leave up to maternity leave. The proposal for sick leave is made by the occupational medicine department at the pregnant worker's request, along with the gynecologist's report. The data were collected over the past year, during visits of pregnant healthcare workers to the OM unit while seeking for sick leave.

3. RESULTS

The total number of approved sick leaves due to pregnancy varies up to 3% of the total number of employees. Since these are 100% paid sick leaves, with a steady increase in trend, this represents a significant cost for the hospital centre. In addition to the financial cost, it leads to a shortage of already insufficient healthcare personnel, potentially resulting in the closure of certain departments. There is no a statistically significant difference ($p = .1985$) between departments regarding the weeks of pregnancy at the time of requesting maternity leave (see Figure 1).

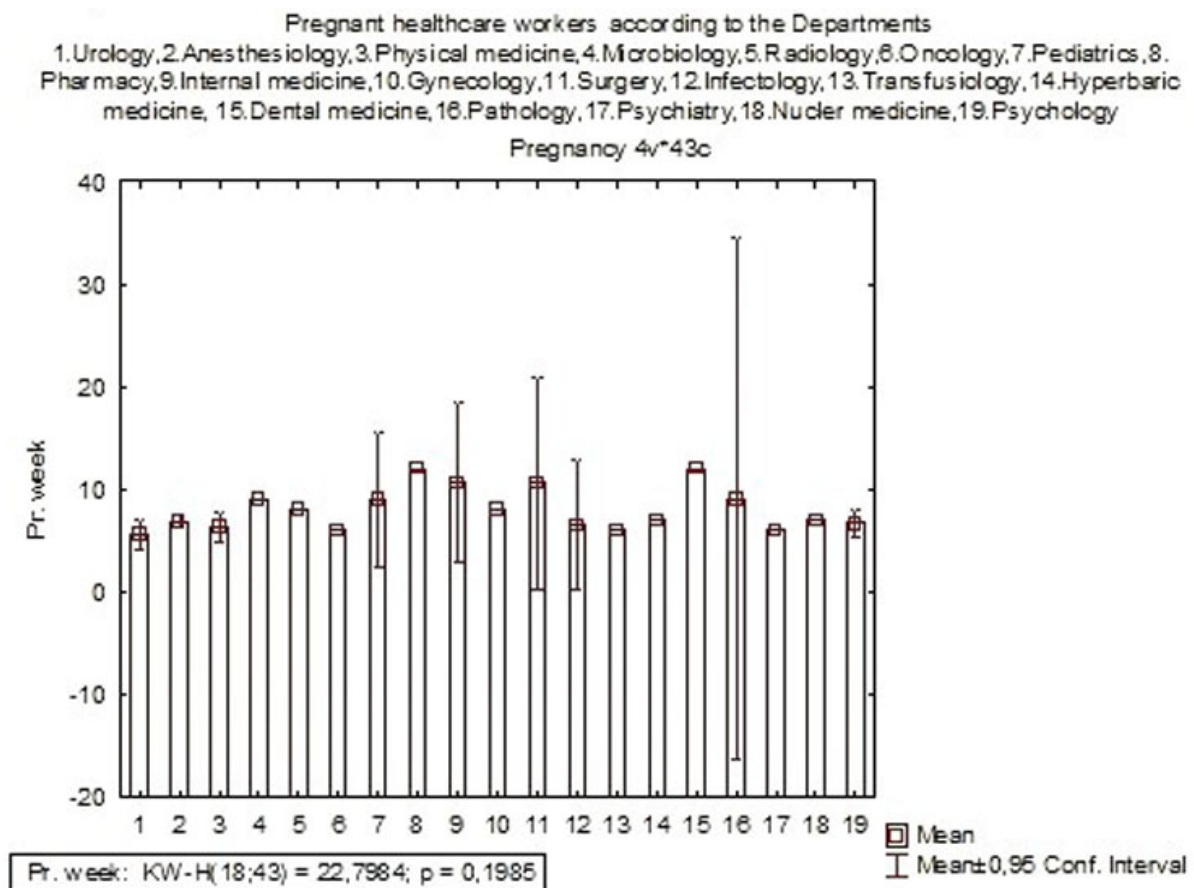


Figure 1. Pregnant healthcare workers in weeks of pregnancy according to Departments in the Clinical Hospital Centre Rijeka

4. DISCUSSION

When discussing ionizing radiation, medical workers are the most exposed. Low doses of radiation in female healthcare workers can lead to low birth weight, spontaneous miscarriages, and stillbirths. Radiation has a teratogenic effect, in addition to its already proven carcinogenic effects.^[10] A similar situation exists with occupational exposure to anti-cancer drugs, or cytostatics.^[11] Despite protective measures, cisplatin and cyclophosphamide have been found in the urine of exposed nurses, indicating that there is no absolute protection for exposed healthcare workers. Therefore, granting sick leave to pregnant healthcare workers who work in areas of ionizing radiation and with cytostatics is justified. However, there are cases where some doctors continue working in radiation zones during pregnancy, even in diagnostic radiology positions, with enhanced protective measures and avoidance of fluoroscopic X-ray tubes.^[12] Some interventional radiologists also continue working during pregnancy in radiation zones.^[13] The well-known saying is “The more you know about radiation, the less you fear it.”

Similarly, for female healthcare workers exposed to anaesthetic gases, it is also justified to grant sick leave, as it is for staff in infectious diseases clinics, neurology, and physical medicine, where they handle immobile and severely immobile patients and come into contact with blood and secretions.

The decision depends on each case. In any case, if the pregnant worker is assessed as fit for work, and the employer cannot find a suitable temporary position, the worker can take “ordinary sick leave” through the Croatian Health Insurance Fund, paid at around 70% of the regular salary. The occupational medicine specialist must be very cautious, especially during the first employment, to prevent exploitation of the healthcare system. There have been cases where employees are hired, and after just a few days of work, they request sick leave due to pregnancy.

The Republic of Croatia became the 28th member of the EU in 2013. The standard of healthcare is satisfactory, especially in cities and larger towns. Healthcare is managed by the Ministry of Health, which oversees the national health development strategy through the Croatian Health Insurance Fund. The Fund is financed by employed citizens, employers, and partly from EU funds. Mandatory health insurance provides insured persons with rights and obligations under such insurance, based on the principles of reciprocity, solidarity, and equality, as defined by Directive 2011/24/EU. This also includes rights in cases of work-related injuries and occupational diseases. Insured persons include policyholders, children under the age of 18, family members of the insured, and primarily individuals employed in Croatia.^[14] Article 19,

item 4 of the Law on Mandatory Health Insurance regulates the protection of women in relation to pregnancy monitoring and childbirth. Article 39 governs temporary incapacity due to illness and pregnancy complications. This means that in cases of pregnancy complications, women are automatically put on sick leave covered by the Fund, based on the referral of a gynaecologist and a general practitioner. In occupational medicine, we handle regular pregnancies depending on the type of job and working conditions. If the conditions are unfavourable, a healthy pregnant woman may be reassigned to another position, usually administrative work. If she refuses reassignment or continues to fear for her health and the health of her unborn child without valid reason, she is still entitled to “regular” sick leave, paid at 70%, ensuring she is financially supported.

In conclusion, if a pregnant worker fears any health consequences, there is an option, albeit with slightly lower income.

There are many cases where sick leave should be granted to pregnant women, but a critical and selective approach is necessary, as there are many requests for unjustified sick leave from healthcare workers who are not in positions with special working conditions.

It is clear that shift work and weekend work are inherently demanding, placing a significant psychophysical burden all healthcare workers. Additionally, pregnant women are in a particularly sensitive condition, requiring more frequent meals, experiencing fatigue sooner than regular workers, etc. These demands are consistent across all departments, which explains why there is no statistical difference between departments in terms of requests for sick leave. Pregnant workers that are reassigned to other workplaces with minimal potential hazards continue to work safely, with no adverse outcomes for them or their unborn child. On the contrary, if any harm had occurred, they would have the legal right to immediately sue both the medical specialist in Occupational Medicine as well as their employer – the Clinical Hospital Centre Rijeka. However, to date, no such incidents have been reported for pregnant workers and their fetuses, which suggests that the OM specialists have consistently made accurate workplace assessments. In the Republic of Croatia, pregnant women are protected under legislation, specifically the Rulebook on Conditions and Procedures for Exercising Rights to Breastfeeding Breaks and Leave for Pregnant Women, and with the Law on Mandatory Health Insurance.

The duty of the OM specialist is twofold - on one side, to protect the pregnant worker, i.e., to correctly assess that the workplace poses no risk for mother and fetus during pregnancy, and on the other side, to protect the institution, i.e., the Hospital, especially in environments where the majority

of employed staff are women. In contrary, the hospital can risk severe operations problems due to the lack of employees.

With this critical and selective approach, occupational medicine, in collaboration with hospital management, can preserve hospital resources and operational capacity while safeguarding and monitoring the health and safety of pregnant workers.

ACKNOWLEDGEMENTS

I wish to thank the professor Ana Kovačević who checked and improved the English text.

FUNDING

The author has used his own funds to gather all the data and pay to improve personally written english text for the Journal.

CONFLICTS OF INTEREST DISCLOSURE

The author declares there is no conflicts of interest.

INFORMED CONSENT

Written consent was obtained.

ETHICAL STATEMENT

The paper was written according to the Helsinki Declaration, no names or any personal information were not revealed and there is no possibility to connect the text with any of the

female workers.

ETHICS APPROVAL

The Publication Ethics Committee of the Association for Health Sciences and Education. The journal's policies adhere to the Core Practices established by the Committee on Publication Ethics (COPE).

PROVENANCE AND PEER REVIEW

Not commissioned; externally double-blind peer reviewed.

DATA AVAILABILITY STATEMENT

The author has in possession all the pregnant workers written search during seeking the maternal sick-leave.

DATA SHARING STATEMENT

The published data in Open Access are automatically free for scientific and educational sharing.

OPEN ACCESS

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).

COPYRIGHTS

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

REFERENCES

- [1] Book of Rules on the Right to Sick Leave for Pregnant Workers. People's Gazette. 2011; 112.
- [2] Cai C, Vandermeer B, Khurana R, et al. The impact of occupational shift work and working hours during pregnancy on health outcomes: a systematic review and meta-analysis. *Am J Obstet Gynecol.* 2019; 221(6): 563-576. PMID: 31276631. <https://doi.org/10.1016/j.ajog.2019.06.051>
- [3] Kader M, Bigert C, Anderson T, et al. Shift and night work during pregnancy and preterm birth — a cohort study of Swedish health-care employees. *Int J Epidemiol.* 2022; 50(6): 1864-1874. PMID: 34999871. <https://doi.org/10.1093/ije/dyab135>
- [4] Booker LA, Fitzgerald J, Mills J, et al. Sleep and fatigue management strategies: How nurses, midwives, and paramedics cope with shift work schedules. *Nurs Open.* 2014; 11(1): e2099. PMID: 38268269. <https://doi.org/10.1002/nop2.2099>
- [5] Wallace DA, Reid K, Grobman WA, et al. Associations between evening shift work, irregular sleep timing, and gestational diabetes. *Sleep.* 2023; 46(4): zsac297. PMID: 36477807. <https://doi.org/10.1093/sleep/zsac297>
- [6] Begtrup LM, Specht IM, Hammer PEC, et al. Night work and miscarriage: a Danish nationwide register-based cohort study. *Occup Environ Med.* 2019; 76(5): 302-308. PMID: 30910992. <https://doi.org/10.1136/oemed-2018-105592>
- [7] Grajewski B, Rocheleau CM, Lawson CC, et al. Will my work affect my pregnancy? *Am J Obstet Gynecol.* 2016; 214(5): 597-602. PMID: 26976559. <https://doi.org/10.1016/j.ajog.2016.03.005>
- [8] Alex MR. Occupational hazards for pregnant nurses. *Am J Nurs.* 2011; 111(1): 28-37. PMID: 21191230. <https://doi.org/10.1097/01.NAJ.0000393056.01687.40>
- [9] Sejbäck CS, Pedersen J, Schlünssen V, et al. The influence of multiple occupational exposures on pregnancy-related work absence. *Scand J Environ Health.* 2020; 46(1): 60-68. PMID: 31247116. <https://doi.org/10.5271/sjweh.3840>
- [10] Frangione B, Hinton P, Villeneuve PJ. Low-dose ionizing radiation and adverse birth outcomes: a systematic review and meta-analysis. *Int Arch Occup Environ Health.* 2023; 96(1): 77-92. PMID: 35913560. <https://doi.org/10.1007/s00420-022-01911-2>
- [11] Sorsa M, Hemminki K, Vainio H. Occupational exposure to anti-cancer drugs-potential and real hazards. *Mutat Res.* 1985; 154(2): 135-49. PMID: 3929080. [https://doi.org/10.1016/0165-1110\(85\)90024-7](https://doi.org/10.1016/0165-1110(85)90024-7)
- [12] Marx MV. Baby on board: Managing occupational radiation exposure during pregnancy. *Tech Vasc Interv Radiol.* 2018; 21(1): 32-36. PMID: 29471998. <https://doi.org/10.1053/j.tvir.2017.12.007>

- [13] Ghatann CE, Fasciotta M, Pjacobsen J. Occupational radiation exposure during pregnancy: A survey of attitudes and practices among interventional radiologists. *J Vasc Interv Radiol*. 2016; 27(7): 1013-1020.e3. PMID: 27236211. <https://doi.org/10.1016/j.jvir> .2016.03.040
- [14] The Law on Mandatory Health Insurance in the Republic of Croatia. *People's Gazette*. 2013; 80.