

Protection of pregnant woman in working place: during pregnancy and maternity leaving

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Abstract

This paper outlines an operating procedure aimed to protect female employees during pregnancy and breast feeding period, whilst they carry out various activities which may expose them and their baby to health hazards.

This method, developed by the Coordinating Physician of "Sapienza" University of Rome Occupational Medical Centre (OMC), is a practical tool to be used for Risk Assessment in research laboratories, for informing and addressing the heads of departments of various organizations on the main regulatory requirements aiming to protect female employees.

This paper consists of two parts: a) Outline of Risks; b) Job Duties.

At last, the work fitness (referring to Legislative Decree no. 151/01) given by OMC in the last five years, (2009 to 2013) to the employees/equivalent are examined and described, to illustrate the effectiveness of this methodology aiming to promote and protect health and reproduction.

Keywords: Working mothers, risk during pregnancy, breastfeeding

Introduction

The Italian legal system protects woman and her baby during her working life with a Maternity Leave Framework defined in Legislative Decree (D. Lgs.) no. 151/01, then also implemented by D.Lgs. no. 81 / 08. These laws require that the employer should preventively assess all risks for the Safety and Health of pregnant and breastfeeding employees, identifying measures of prevention and protection to be adopted [1,2].

This method has proved to be a useful Risk Assessment operational tool for female employees care during pregnancy and maternity leaving, especially for all those who have responsibility and obligation towards the protection of the working mothers (Rector, Deans, Heads of Departments, Heads of Research, Compliance Officers, Head of Prevention and Protection,

Occupational Physicians, Representatives for Workers' Safety) [3,4,5].

The results of research carried out on female population undergoing health checks for conventional risks (chemical, physical, biological, and concerning night work) at "Sapienza" University of Rome OMC from 2009 to 2013 are shown in table 1.

Materials and method

The employees surveyed in this study are of two categories:

a. teaching staff: researchers, technical and administrative employees of the University Administration;

b. equivalent personnel: university students, doctoral students, specialists, trainees, fellows, those

Table.1: Female population undergoes health surveillance in risk: chemical, physical, biological, night work

Analyzed Period (year)	2009	2010	2011	2012	2013
Employees/students (no.)	390	364	478	496	408
Employees/students removed from risk jobs according with D. Lgs 151/2001(no.)	24	14	20	19	39
Employees/equivalents removed from risk jobs according with D. Lgs 151/2001 (percentage %)	6%	3%	5%	4%	10%

attending educational research or in-service workshops.

These workers listed above, hereinafter referred to as "female employees", must give notice of their pregnancy in order to benefit, even temporarily, from all the precautions and measures necessary for both the mother and child. protection and physical safety.

The protocol is especially aimed at all pregnant women, those who have recently given birth or are breastfeeding and carrying out activities involving exposure to physical agents (such as ionizing and non-ionizing), chemical agents (such as those labeled with R39, R40, R42, R43, R45, R46, R48, R49, R61 and H370, H351, H334, H317, H350, H340, H372 / H373, H350i, H360, H361, H362 or some drugs such as anticancer drugs) and biological agents (such as : Toxoplasma, rubella virus, etc.) that expose the pregnant woman and the unborn child to health risks or who perform duties prohibited under Articles. 7:08 and evaluated in accordance with art. 11 of Legislative Decree no. 151/01.

The law requires that female employees involved in activities at risk of exposure to ionizing radiation in categories A and B notify their workplace as soon as they come to know of their pregnancy [5,6,7].

The framework used by the OMC (Attachment I), describes the main occupational risks for pregnant and/or post-partum women. In this model, the risks are referred to in Annexes A and B of D.Lgs.151 / 01 including risks that require an in-depth assessment of the duration and type of exposure in relation to the physiological condition of the pregnancy and post-partum by the competent physician and the RSPP (eg Work-Related Stress, Biohazard, Chemical Risk, Exposure to non-Ionizing Radiation (NIR), etc..) [8,9,10].

Once they come to know of their pregnancy, the worker must:

- a. withdraw from activities that involve exposure to above mentioned substances and environments;
- b. bound from entering into environments where these are used;
- c. must immediately inform the workplace manager.

The workplace manager must:

- a. check if the roles carried out by the pregnant/post-partum worker that are in accordance with Articles 7, 8 and 11 of Legislative Decree no. 151/01 and document risk assessment (DVR) ;
- b. if the worker is being exposed to risks for her pregnancy and / or breastfeeding, modify the conditions and / or working hours to avoid exposure to such risks;
- c. give written notice (Annex I) to the Head Physician at the Centre for Occupational Health [11,12,13].

The Head Physician, will perform a medical examination and make a judgment regarding the risk activities according to law. 151/01 and give recommendations regarding prevention and protection of the worker indicating the rules of conduct that must be followed.

The workplace manager if appropriate, should notify the worker and the Company Doctor (Attachment II) of the change of conditions and / or type of work.

In case it is not possible to find a suitable job and / or an alternative work site that is safe for the pregnant/post-partum worker, the Employer notifies the Local Labour Directorate responsible for the area who can deem it illegal for the employee to attend work. (leave of absence due to risk at work).

Results

The data collected by the OMC at Sapienza

University during 2009 to 2013 has shown the effectiveness of the application of this method, with respect to the current legislation [14]. The results obtained from Table 1 allow us to form the following hypothesis: during the years 2009-2013 the percentage of employees / equivalents removed from risk jobs has increased. A statistical analysis was also performed to see if there are differences over time, using the chi-square test, chi-square value of 19.63 and a $p < 0.001$.

The data uses a sample of 500 employees / equivalents per year, who have undergone health checks required by law for the following risks:

- a. chemical risk;
- b. biohazard;
- c. physical risk;
- d. night work.

Conclusions

This study carried out at the OMC, due to both the Head Physician's experience in the field and the expertise of various health specialists, allows to evaluate possible

source of health hazard to pregnant women and their babies in the working place and, in this view, to identify how improving preventive measures in University working place. The expertise of the various laboratory managers has been primary in identifying in the various working environments (where poly-exposures are simultaneously present) those risks that, even at the low level, can determine with a synergistic effect damage to the woman and / or to the child. This operating procedure implemented at the Sapienza University OMC has increased the awareness of risk amongst workers and their supervisors. It has also allowed the Occupational Health Physician to promote protective health measures and to carry out a detailed analysis in many Research Laboratories. Therefore the results confirm the effectiveness of the existing methodology having the information increased over the years with widespread dissemination of dedicated template for the protection of working mothers.

References

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10. Interpello n.26/2008 Ministero del Lavoro, della Salute e delle Politiche Sociali, Art. 9, D.Lgs.124/2004 – tutela delle lavoratrici madri esposte a radiazioni ionizzanti.
11. Legge 08.03.2000 n.53, “Disposizioni per il sostegno della maternità e della paternità, per il diritto alla cura e alla formazione e per il coordinamento dei tempi delle città” art.12 c.3 .
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Facs simile (Attachment 1)

Subject: protecting the safety and health of pregnant workers who have recently given birth or are breastfeeding (Legislative Decree 151/2001)

With this note, we inform you that the

Dr / Mrs _____
with the qualification of _____

Member of the Department / Institute notified me directly of their pregnancy, with expected date of delivery scheduled for the day _____

The question, which has since been signed by the precise provisions for its abstention from performing any work at risk, lends his work at the functional unit _____

Site at _____
the building _____

It should be noted that in the activity carried out to date by the person concerned is a possible exposure to:

- MHH (Manual Handling Hazard) grade average, high and / or weights exceeding 3kg handled on a non-occasional basis.
- Work involving the maintenance of prolonged standing for more than half that time or to oblige a particularly tiring or ergonomically incongruous for the state of pregnancy.
- Biohazard: works with medium risk / high exposure to potentially infectious biological agents (risk groups 2,3,4 art.268 of Legislative Decree no. 81/08).
- Chemical Risk: Works with exposure to agents, substances and/or mixtures classified as toxic (T), very toxic (T +), corrosive (C), explosive (E), harmful (Xn) or extremely flammable (F +)., Or substances and / or mixtures with one or more of the risks described as R39, R40, R42, R43, R45, R46, R48, R49, R61 and H370, H351, H334, H317, H350, H340, H372/H373, H350i, H360, H361, H362.

Risk phrases (R) according to the European Directive 67/548 / EEC and subsequent amendments for substances and in accordance with Directive 1999/45 / EEC, as amended for mixtures.

R39	Danger of very serious irreversible effects (H370)
R40	Possible risk of cancer - insufficient evidence (H351)
R42	May cause sensitization by inhalation (H334)
R43	May cause sensitization by skin contact (H317)
R45	May cause cancer (H350)
R46	May cause heritable genetic damage (H340)
R48	Danger of serious damage to health by prolonged exposure (H372 / H373)
R49	May cause cancer by inhalation (H350i)
R61	May cause harm to the unborn child (H360)
R63	Possible risk of harm to the unborn child (H361)
R64	May cause harm to breastfed babies (H362)

Hazard (H) (New rules for the classification of hazardous chemicals- Reg. / 1272/2008 - CLP).

H370	Causes damage to organs
H351	Suspected of causing cancer
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
H317	May cause an allergic skin reaction
H350	May cause cancer
H340	May cause genetic defects
H372/H373	Causes damage to organs / May cause damage to organs
H350i	May cause cancer by inhalation
H360	May damage fertility or the unborn child
H361	Suspected of damaging fertility or the unborn child.
H362	It can be harmful for infants breastfed

In addition, works with handling antineoplastic, antiviral and antifungal or with exposure to anesthetic gases.

- Physical Risk: Work involving exposure to Ionizing Radiations, exposure to Non-Ionizing Radiation (NIR), mechanical shock or vibration, exposure to noise (Lepd> 80 dBA) or high temperatures and thermal shock.
- Work at night and / or availability (from 24.00 to 06.00).
- Work-related stress: work situations that expose them to high mental fatigue or emotional stress.
- Conducting and other duties on board the means of transport or carry out other duties on board.
- Other _____

While waiting for instructions from the occupational physician resulting from the measurement made by him, Dr. / Ms _____ will continue to refrain from carrying out the work activities and attend the workplace that could lead to its possible exposure to one of the risks listed above.

THE SITE MANAGER

Facs simile Attachment II

Subject: Removal from job at risk pursuant to Legislative Decree. 151/2001 for the protection of workers / others who are pregnant, have recently given birth or are breastfeeding.

In reference to the request for assignment to another job of the person named below, in accordance with the provisions of the Decree in question is hereby given that:

Dr. / Ms _____
Member of the Department / Institute directed by me _____ with the role of _____

- will be employed immediately in the following task:
- the working conditions and the work schedule in the following way:

- It is not possible to find them a suitable job for the entire period of pregnancy for the following reasons:

- It is not possible to find them a suitable job for the entire period of pregnancy and up to seven months after giving birth, for the following reasons:

- It is not possible to find it a suitable job by the end of the period of compulsory leave after childbirth up to seven months after giving birth for the following reasons:

THE SITE MANAGER