



## Original Article

### HEALTH CONDITIONS OF WOMEN WORKING IN THE CLOTHING INDUSTRY

*CONDIÇÕES DE SAÚDE DA MULHER TRABALHADORA NA INDÚSTRIA DO VESTUÁRIO*

*CONDICIONES DE SALUD DE LA MUJER TRABAJADORA EN LA INDÚSTRIA TEXTIL*

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This study aimed to investigate aspects of living conditions and health of female workers in the textile industry. This is a descriptive exploratory study conducted in the northwest of Paraná, in four municipalities selected for convenience. Data were collected in October and November 2011, in the workplace, through self-administered questionnaire. The sample consisted of 177 women working in the textile industries, aged between 18 and 60 years; 83.9% of women have more than eight years of study and have an average household income of R\$1,662.34. Regarding lifestyle, 44.2% practice physical actives, 80.2% do not use alcohol and only 6.7% are smokers. The lifestyle allied with poor working conditions, may favor the onset of diseases, so policies of workers' health must contemplate actions to promote health and better working conditions.

**Descriptors:** Working Conditions; Women's Health; Textile Industry.

Objetivo foi investigar aspectos das condições de vida e saúde da mulher trabalhadora na indústria têxtil. Estudo descritivo exploratório, realizado na região noroeste do Paraná, em quatro municípios selecionados por conveniência. Os dados foram coletados nos meses de outubro e novembro de 2011, no próprio local de trabalho, por meio de questionário autoaplicável. A amostra foi constituída por 177 mulheres trabalhadoras em indústrias do vestuário, com idades entre 18 e 60 anos; 83,9% das mulheres tem mais de oito anos de estudo e possuem renda familiar média de R\$1.662,34. Relacionado aos hábitos de vida, 44,2% realizam atividade física e 80,2% não utilizam bebida alcoólica e 6,7% são fumantes. O estilo de vida aliado a condições inadequadas de trabalho, podem favorecer o aparecimento de doenças, assim, as políticas de saúde do trabalhador devem vislumbrar ações de promoção da saúde e melhores condições de trabalho.

**Descritores:** Condições de Trabalho; Saúde da Mulher; Indústria Têxtil.

El objetivo fue investigar aspectos de las condiciones de vida y la salud de las trabajadoras de la industria textil. Estudio exploratorio, descriptivo, realizado en el noroeste de Paraná, Brasil, en cuatro municipios seleccionados por conveniencia. Los datos fueron recogidos en octubre y noviembre de 2011, en el lugar de trabajo, a través de cuestionario auto administrado. La muestra consistió de 177 mujeres, con edades comprendidas entre 18 y 60 años, 83,9% de las mujeres tienen más de ocho años de estudios y renta familiar promedio de R\$ 1,662.34. En cuanto al estilo de vida, 44,2% realizaban actividad física; 80,2% no usaban alcohol y 6,7% eran fumadoras. El estilo de vida junto con las malas condiciones de trabajo pueden favorecer la aparición de enfermedades, y las políticas de salud de los trabajadores debe vislumbrar acciones para promover la salud y mejores condiciones de trabajo.

**Descriptor:** Condiciones de Trabajo; Salud de la Mujer; Industria Textil.

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## INTRODUCTION

The National Occupational Health And Safety Policy aims to ensure that the work is performed under conditions that contribute to the improvement of quality of life, personal and social fulfillment of workers, without damaging their health and their physical and mental integrity<sup>(1)</sup>. All men and women engaged in activities to support themselves and/or their dependents, whether formal or informal, are considered workers.

Therefore, the work has a crucial role in human life; besides being a source of survival, it also makes people feel useful, productive and appreciated, with the real possibility of self-realization. However, when the work is performed under inappropriate conditions, it may become harmful, damaging health, causing diseases, leading to inactivity, shortening life and even causing death<sup>(1)</sup>. In 2010, Social Security reported 701,496 occupational accidents, with 2,712 deaths, and 24,310 of these accidents occurred in the textile industry; however, this data does not take into account the self-employed and domestic workers.

The women's movement arose from the textile industry, questioning old stereotypes about the female role, and creating new possibilities and opportunities in society for the appearance of activities outside the home. This movement was favored by women's increased access to education, which led to the incorporation of a greater number of women in the labor market and increased their political and social participation<sup>(2)</sup>.

However, this new role of women did not unlink them from domestic chores and from the education of children, resulting in an accumulation of attributions, which have led to an overload of work due to double or triple shifts, to emotional stress and causes damage to their health. Women considered responsible for the care of their family's health are dependents of the health system, and in many situations the assistance is very sloppy, barely hearing, valuing and solving their needs.

Despite the advances and achievements, we realize that there are still gaps in the Unified Health System (SUS), with regard to the access of working women to the service and how they are welcomed in this system, since we still find a significant group of people that never performed any preventive exams with the regularity recommended due to the lack of access to Basic Health Unit (BHU). Thus, health professionals need to understand that a greater commitment in healthcare of working women will directly reflect in family care.

However, SUS still faces a precarious interaction in health teams and lack of training to deal with the subjective dimension that permeates the care practices, which is verified by the high number of women of childbearing age with poor health levels, due to the difficulty of understanding their health-disease process, requiring a new paradigm where they see themselves inserted in a dynamic process<sup>(3)</sup>. Thus, this study aimed to investigate aspects of living conditions and health of women working in the textile industry.

## METHOD

This is a descriptive exploratory study with quantitative analysis. The sample consisted of 177 women working in textile industries located in four cities in Paraná State, Brazil: Sarandi, Mandaguaçu, Santa Fé and Paranavaí, which are part of the textile industrial center in the northwest of Paraná, known as the fashion complex of South Brazil, concentrating several textile industries.

In defining the industries that would be part of the study, we considered those that had Taxpayer Identification Number, with more than 20 female workers, and that allowed the employees to participate in the research. For data collection we used a semi-structured questionnaire developed by the researchers, consisting of two parts, addressing the socio-demographic characteristics and health and work conditions.

The inclusion criteria for the women in the study were: being older than 18 years, working in the same job for at least one year, and return the completed questionnaire within the prescribed period. Questionnaires were given to all women who met the inclusion criteria, and the sample was established from the return of questionnaires, i.e. all women who returned the completed questionnaire, after three attempts of collection, were included in the study.

Data collection happened in the workplace, in October and November 2011, through self-administered questionnaire, which was given to women after guidance for its filling and returned to the researchers after two days. The initial contact was established after the approval of the board of selected industries. For data analysis, they were organized in a spreadsheet of the program Microsoft Office Excel<sup>®</sup> and submitted to descriptive statistical analysis.

The study was developed in accordance with the Resolution No. 196/96 of the National Health Council, and its project was assessed and approved by the Standing Committee on Ethics in Research Involving Humans, Universidade Estadual de Maringá, under protocol No. 566/2011. All participants were informed about the study objectives and formalized the participation by signing the Free and Informed Consent in two copies.

## RESULTS

The study population was composed of 177 women, who account for 63.2% of workers in their respective industries, of which 39 were from Sarandi (22.1%), 21 from Santa Fé (11.8%), 56 from Mandaguacu (31.6%) and 61 from Paranaíba (34.5%), whose characteristics are shown in Table 1.

**Table 1** - Distribution according to socio-demographic characteristics of women. Northwest Region, Paraná, Brazil, 2011

Characterization	N	%
Age group (n=176)		
18-29 years	77	43,7
30-39 years	44	25,1
40-49 years	41	23,3
50-59 years	12	6,8
60 years and older	2	1,1
Living with partner (n=176)		
Yes	113	64,2
No	63	35,8
Education (n=174)		
Less than 8 years of study	28	16,1
From 8 to 11 years of study	134	77
More than 11 years of study	12	6,9
Household income* (n=153)		
Up to R\$ 750.00	20	13,1
From R\$ 751.00 to 1,100.00	20	13,1
From R\$ 1,101.00 to 1,650.00	49	32,1
From R\$ 1,651.00 to 2,950.00	52	33,9
More than R\$ 2,951.00	12	7,8
Total	177	100

\*Classification of the Brazilian Institute of Geography and Statistics (IBGE).

The average age of women was 33.2 years, with a minimum of 18 years and maximum of 62 years, with standard deviation of 11.2 years. The average household income was R\$ 1,662.34, ranging from R\$ 570.00 to R\$ 8,000.00, with standard deviation of R\$ 917.10. Most women (87.1%) contributed to the household expenses, of which 22.5% were responsible for the home, and 10.7% answered that their salary was just for their personal expenses. The average number of individuals per family

was three people. Table 2 shows the gynecological and obstetric history of working women.

Of the 24 abortions that occurred, 91.6% were spontaneous, and women did not mention whether they were or not work-related. On health care, gynecological consultation and preventive material collection were the most reported practices by women. It is worth mentioning that 50.3% of consultations were performed through SUS, 31.2% through health insurance, and 13.6% private.

**Table 2** - Obstetric and gynecological history of women. Northwest Region, Paraná, Brazil, 2011

<b>Obstetric and gynecological history</b>	<b>N</b>	<b>%</b>
Number of pregnancies (n=177)		
0	51*	28,8
1 or 2	92	51,9
More than 3	34	19,3
Abortion (n=174)		
Yes	24	13,6
No	150	84,4
Number of children (n=176)		
0	52*	29,5
1 or 2	101	57,4
3 or more	23	13,1
Protection against STD/AIDS (n=165)		
Yes	96	58,2
No	69	41,8
Last gynecological consultation (n=162)		
Less than 1 year	137	84,6
From 1 to 3 years	13	8,1
More than 3 years	9	5,5
Never had	3	1,8
Preventive material collection in last consultation (n=177)		
Yes	146	83,9
No	31	16,1
Breast examination in last consultation (n=177)		
Yes	67	38,5
No	110	61,5
Total	177	100

\*The values differ because one of the women who became pregnant miscarried, having no children.

Regarding the lifestyle, we observe in Table 3 that most women have double workday, do not use alcohol and do not smoke, and more than half do not practice physical

activity, have up to three meals a day, having the habit of snacking between meals.

**Table 3** - Life habits of working women. Northwest Region, Paraná, Brazil, 2011

Life habits	N	%
Perform domestic chores (n=172)		
Yes	148	86,1
No	24	13,9
Alcohol consumption (n=177)		
Yes	35	19,8
No	142	80,2
Smoker (n=177)		
Yes	12	6,7
No	165	93,3
Practice physical activity (n=177)		
Yes	78	44,2
No	99	55,8
Number of meals per day (n=170)		
Up to 3	109	64,1
More than 3	61	35,9
Snacking between meals (n=177)		
Yes	106	59,8
No	71	40,2
Hours of sleep per night (n=173)		
Less than 6 hours	28	16,2
From 6 to 8 hours	130	75,1
More than 8 hours	15	8,7
Total	177	100

To perform domestic chores, i.e. the double workday, 60.5% had help from someone of their family with household activities. However, 83.2% reported that they could handle work and household chores. This was confirmed when asked if they were fulfilled with the life they had and 66.7% answered yes.

With regard to alcohol consumption, 82.8% used alcohol no more than once a week and none of the women reported consuming alcohol more than twice a week.

As for physical activity, 70.5% practiced it at least three times a week, and walking was the most frequent activity (55.2%). An interesting observation about this item is that 48.7% of women began to practice physical activity for less than one year. As for sleeping, 75.1% reported sleeping 6-8 hours a day.

Table 4 presents some characteristics related to working conditions in the industries studied.

**Table 4** - Working conditions in the textile industry. Northwest Region, Paraná, Brazil, 2011

<b>Working conditions</b>	<b>N</b>	<b>%</b>
Function in the industry (n=163)		
Seamstress	61	37,4
Auxiliary seamstress	36	22,1
Ironing	50	30,6
Reviewer	2	1,2
Production manager	5	3,2
Stylist/designer	2	1,2
Administrative	4	2,5
General services	3	1,8
Time in the function (n=161)		
Less than 5 years	101	62,8
From 5 to 10 years	32	19,8
From 10 to 15 years	17	10,6
More than 15 years	11	6,8
Availability of PPE (n=177)		
Yes	120	67,7
No	57	32,3
Occupational accident (n=177)		
Yes	12	6,7
No	165	93,3
Total	177	100

Regarding accidents, the most frequently mentioned were "finger caught in the machine" (5), "stitched finger" (2) and "a piece of finger or hand cut" (3). 58.3% of the accidents resulted in work leave for a period that ranged from 15 days to one year. However, when the women returned to work, they said it was not necessary readapting to the functions and reported that they were assisted by the industry during work leave.

Table 5 shows the health conditions of working women, associating the main health problems reported,

their relationship to work, use of continuous medication, BMI, health perception and stress management strategies.

Of the 62 women who believe their health problems are related to work, 37.1% referred to the position as a triggering factor of the problem, 17.7% to the dust of industry, and 14.5% to repetitive movements. On the continuous-use medication, 54.4% used contraception, 14.7% used hypertension medication, and 8.8% used thyroid medication, 11.7% of women used more than one medication.

**Table 5** - Health conditions of working women. Northwest Region, Paraná, Brazil, 2011

Health conditions	N	%
Most frequent health problems*		
Back pain	72	40,6
Headache	68	34,8
Allergies	43	24,2
Vision problems	48	27,1
Urinary infection	22	12,4
Tendinitis/Repetitive strain injury	22	12,4
Hearing loss	10	5,6
Work-related health problems (n=177)		
Yes	62	35,1
No	115	64,9
Continuous-use medication (n=173)		
Yes	68	39,3
No	105	60,7
BMI (n=163)		
Low weight	5	3,2
Normal weight	97	59,5
Overweight	42	25,7
Class I obesity	15	9,2
Class II obesity	3	1,8
Class III obesity	1	0,6
Perception of health (n=171)		
Excellent, very good or good	154	90,1
Regular or bad	17	9,9
Stress management strategies** (n=132)		
Being quiet, alone	20	15,1
Going out, walking	19	14,3
Crying	18	13,6
Sleeping	12	3,1
Praying	11	8,3
Listening to music	10	7,5
Total	177	100

\*Women reported more than one answer. \*\*Main strategies used.

## DISCUSSION

The study group was composed of women, mostly young, with more than eight years of education, and average monthly family income of R\$ 1,662.34, according to the classification used by the IBGE, they belonged to class C1, characterized by average family income of R\$ 1,391.00, unlike the group studied in Ceará<sup>(4)</sup>, where

women had monthly family income between R\$ 350.00 and R\$ 900.00, characterizing the classes D (average family income of R\$ 618.00) and E (average family income of R\$ 403.00), besides the low educational level.

Most women (87.1%) contribute significantly to the household expenses. These numbers can be explained by

two factors: the access to education is higher in the South Region of Brazil than in the Northeast, and in the studied area the demand for workers for the textile industry is less than the job supply, leading to a strong competition for labor force and hence higher salaries, unlike observed in a study conducted in Blumenau<sup>(5)</sup>, where there is prevalence of informal small factories established in houses, with intense working hours, low pay, lack of security and assistance to the workers in this sector.

The fact that most women have more than eight years of study follows the national trend, once the education level of the population has risen considerably, especially among women, since 39% of them started having more than nine years of study, compared to 35% of men<sup>(6)</sup>. This is particularly important to integrate women into the labor market, since the more the women qualify, more chances they have in finding paid work<sup>(7)</sup>. This is confirmed in the industry, especially in the textile and clothing sectors, where women represent 61% of formal jobs<sup>(6)</sup>.

The female presence in the labor market is influenced by several factors, one of which is the presence of children. In this study the majority of women had children and companions. Traditionally, the effects of motherhood on the professional life of women were most evident until the 70's, by decreased female activity rates from the age of 25, when supposedly the children were still small. However, since the mid-80s, a reversal trend has been consolidated, indicating that productive activity outside the home has become as important to women as maternity and child care, which sometimes generates a conflict due to the different roles assumed, prevailing one or the other<sup>(8)</sup>. However, the proportion of women who do not abandon the labor market when they have children is steadily increasing, and those with children under five years, have symptoms of intense emotional suffering and have difficulty reconciling all roles<sup>(8)</sup>.

As for their healthcare, women demonstrate to value the prevention habits, through regular medical

consultations and Pap smear, which are important factors for the early diagnosis of cervical cancer. It is essential to encourage women to take the examination for early detection of cervical cancer, since this is the third most common type of cancer that affects women in Brazil, after non-melanoma skin cancer and breast cancer<sup>(9)</sup>.

It is worth mentioning that the breast examination should be performed in all gynecological consultations, which does not happen, since only 38.5% of women in the study had their breasts examined at the last appointment with the gynecologist. This shows that this exam is not carried out systematically by health services. We need different strategies to expand the coverage of Pap smear and breast cancer screening in order to overcome the difficulty of access to public health services, which operate during business hours, when many people are not able to attend it. In one of the industries surveyed, the tests were carried out in the workplace itself, in partnership with the Local Health Department that provided the necessary material and made the collection in a bus, as part of a healthcare project for employees of this company. Another strategy is to implement prevention programs and professional training, since the company is responsible for its workforce, being crucial to promote and preserve health, besides preventing injuries.

The actions of health education should be adapted according to the type of occupation, labor activity, and how this activity influences on worker's health and illness. However, it should also cover activities that promote a better quality of life, such as changing the worker's habits, seeking to reduce chronic diseases and health risk factors, considering not only the occupational factors<sup>(10)</sup>.

Women's quality of life involves factors essential to the human condition, such as physical, psychological, social, cultural and spiritual. Seeking to investigate these aspects, questions relating to lifestyle show how little it is valued, which can be a warning to companies and health services, showing the need to implement actions for health promotion and prevention of occupational injuries.

The proportion of workers who are smokers is lower (6.7%) than that found in the study Surveillance of Risk and Protective Factors for Chronic Diseases Through Telephone Survey (VIGITEL), regarding the Brazilian female population the rate was of 12.7% and with increasing tendency with age<sup>(11)</sup>. We also did not identified excessive alcohol consumption (four or more doses) among the women studied, since they consume alcohol at most twice a week, contradicting the Brazilian rate of excessive alcohol consumption (10.6%), especially in younger age groups<sup>(11)</sup>.

Regarding physical activity, the Global Strategy on Diet, Physical Activity and Health recommends that all individuals stay as active as possible throughout life, with regular practice of some physical activity<sup>(12)</sup>, different from what we found in this study, where less than half of the women practiced some physical activity, and those who reported practicing any activity became aware of its importance for less than one year, which can be seen as a positive point for improving the quality of life.

In this sense, the Food Guide for the Brazilian Population, developed by the Ministry of Health, emphasizes the importance of having at least three main meals (breakfast, lunch and dinner) and two healthy snacks a day, avoiding the habit of snacking between meals as a way to avoid excessive weight gain<sup>(13)</sup>, we emphasize its importance to the results found in this study, where most women have less than three meals a day and usually have snacks between them, thus justifying weight gain among them.

This fact was observed when analyzing the body mass index, where overweight and obesity was verified, as it has been observed in general population. The Household Budget Survey (HBS) 2008-2009 showed that half of Brazilian women were overweight (48%), and 16.9% were obese<sup>(14)</sup>, and VIGITEL 2010 identified 44.3% and 15.5% of overweight and obesity among women, respectively<sup>(11)</sup>, which is similar to our findings.

Still related to health conditions, we identified that women had a great vigil state, with an average of 6 to 8 hours of sleep per day, in accordance to what an adult needs<sup>(15)</sup>. Sleep is an important biological marker that requires a full brain integration, during which occur changes in the physiological and behavioral processes, which are crucial to the health maintenance, given that sleep plays a key role in restoring energy for the next day, balancing the metabolism, whereas its lack causes irritability, poor memory and difficulty concentrating<sup>(15)</sup>.

Stress is a risk for normal human balance and is among the factors of increased rates of hypertension and diabetes, despite being part of the normal functioning of the body. Facing some situations, there is an abnormal wear, basically an inability to tolerate, endure or adapt to the psychological demands of the living environment<sup>(16)</sup>. The answer to it is the result of the interaction between the person's characteristics and the environment demands, depending on how the individual processes information and assesses it, thus determining how to respond. Therefore, we assumed that the stress management strategies most used by workers were being quiet, followed by walking/going out, and crying, a typically female feature.

Another aspect analyzed in this study were issues related to working conditions, which are part of comprehensive health care for workers, involving the promotion of healthy environments and work processes, strengthening environmental surveillance, work-related processes and injuries<sup>(17)</sup>.

As a result of these recommendations, the characterization of the work process in the textile industry enabled the assessment of environmental conditions. Most of the women studied worked as seamstress, sitting in the same position during most of their working hours, which enables the development of diseases related to ergonomic conditions.

Staying in the same function for a long period of time may be a predisposing factor in the occurrence of repetitive strain injuries. Complaints of RSI/WMSD are the

most common, due to wear caused by long journeys, repetitive tasks and work intensification<sup>(18)</sup>.

In the textile industry we observed that the standing and sitting posture adopted at work influences significantly the occurrence of painful conditions, particularly in the spine and legs, since the activities developed by these professionals require a low level of muscle strength and allow misaligned and static postures for prolonged periods<sup>(18)</sup>.

In this study, we observed that back pain, headache, allergies and vision problems were the most frequently reported health problems, which is consistent with the characteristic of working process of the textile industry, since most women told that there was no pause for rest. Pauses ensure the physical recovery from a process of muscle fatigue and micro traumas of organic structure, such as tendons, synovial sheaths and bursa, causing chronic pain and physical limitation that end up preventing the employee from performing routine tasks<sup>(18)</sup>.

The development of preventive actions for occupational accidents and diseases depend on the detection of work-related risk factors. Inadequate postures and movements, repetitions, vibration, static and dynamic load, rest interval and environmental aspects are considered major predictors of the onset of pain conditions<sup>(19)</sup>.

Recognizing these problems and their relationship to working conditions is one of the key points in the decision making regarding health protection and safety at work. One of the most important aspects of occupational safety is the use of personal protective equipment (PPE). The answers regarding PPE may indicate a lack of demand by industry in its use, since most women said they had PPE available, but during observation, when they returned the questionnaires, we did not verified its use by workers, especially the ear protection.

Another important PPE in the textile industry is the mask, which its use has not been observed. Ordinance No. 1339 of the Ministry of Health<sup>(20)</sup> which defines the list of

work-related diseases, state that organic dusts (in the textile industry and bakeries), can lead to work-related cancer (tumors) (group II ICD-10).

We can assume that even if the equipment is available in the industry, not all women are aware of that and therefore do not access it. The industries should follow the Regulatory Standard No. 6 (NR6), which considers PPE: any device or product of individual use by the employee, for the protection of risks likely to threaten the safety and health at work<sup>(19)</sup>, and that should be offered and used by industry employees according to the need of each function and type of work.

In this context, based on women's answers, we verified that the incidence of occupational accidents was below the national average<sup>(21)</sup>, however, we understood that such answers are possibly associated to the lack of knowledge of what is occupational accident, underreporting by fear of job loss, the ineffectiveness of internal committees for accident prevention, and the lack of services of occupational security and medicine.

The current morbidity profile of workers in Brazil is characterized by the coexistence of injuries that are related to specific working conditions, such as typical work accidents and "occupational diseases" that have their frequency, occurrence or severity affected by the work, called "work-related diseases" and common diseases to the whole population, which their causes are not related to work, but affect the workers' health<sup>(22)</sup>, hence the importance of studies relating working conditions with occupational health injuries and accidents.

## CONCLUSION

The rise of the women's movement opened up new possibilities and opportunities in society for the appearance of activities outside the home performed by women. However, it is known that the risk factors present in work environments offer risks for several diseases, especially for non-communicable chronic diseases. The lifestyle allied with poor working conditions, may favor the onset of these

diseases or others related to the work performed by women.

We found a high rate of women with work-related diseases, which are often not valued in the onset of symptoms, and that tend to chronicity and affect their quality of life. Therefore actions for worker's health and safety must approach health promotion, improving the conditions of work environments. Furthermore, we must assume that the use of harmful substances such as alcohol and tobacco should be reduced or eliminated, and on the other hand, physical activity, adopting a healthy diet, good sleep quality and stress reduction should be encouraged, promoting a healthier life.

In SUS policies addressed to women's health, the system is in charge of promoting the quality of life of the female population, encouraging this segment to increase knowledge on their rights; whereas the policy of workers' health predicts the study, prevention, care and surveillance for work-related health injuries. In this context, nurses have a crucial role in the workers' health, performing guidance on health and work process, implementing actions aimed to mitigate the wear and prevent illness, besides helping to promote healthy work environments.

Therefore, it is essential that industries recognize the need for educational activities of health promotion with workers, and that workers assume their responsibilities and understand their role in preventing diseases, both related to work and to life habits.

We considered as study limitations the difficulty of finding more industry managers willing to allow the research, the lack of interest of some women who did not return the questionnaire or not committed to the quality of its filling, leaving gaps and doubts related to some questions. However, the study results show that further researches must be performed in order to allow that working women and their health and living conditions, as well as their health-related needs, are comprehensively understood by health services, since the conditions found do not represent a prerogative of the workers included in

this geographical context, it is a nationwide problem. Therefore, there is the urgent need for the development and implementation of educational activities in order to improve prevention and health promotion.

## REFERENCES

1. Ministério da Saúde (BR). Política Nacional de Segurança e Saúde do Trabalhador. Brasília: Ministério da Saúde; 2004.
2. Teykal CM, Rocha-Coutinho ML. O homem atual e a inserção da mulher no mercado de trabalho. *Psico* [periódico na Internet]. 2007 [citado 2011 dez 10]; 38(3):262-8. Disponível em: <http://revistaseletronicas.pucrs.br/ojs/index.php/revistapsico/article/viewFile/2888/2183>.
3. Noguez PT, Muccillo-Baisch AL, Cezar-Vaz MR, Soares MCF. Aborto espontâneo em mulheres residentes nas proximidades do parque industrial do município do Rio Grande – RS. *Texto Contexto Enferm*. 2008; 17(3):435-46.
4. Morais AMB, Machado MMT, Aquino OS, Almeida MI. Vivência da amamentação por trabalhadoras de uma indústria têxtil do Estado do Ceará, Brasil. *Rev Bras Enferm*. 2011; 64(1):66-71.
5. Polizelli KM, Leite SN. Quem sente é a gente, mas é preciso relevar: a lombalgia na vida das trabalhadoras do setor têxtil de Blumenau – Santa Catarina. *Saúde Soc*. 2010; 19(2):405-17.
6. Vieira LB, Padoin SMM, Paula CC. Cotidiano e implicações da violência contra as mulheres: revisão narrativa da produção científica de enfermagem. Brasil, 1994-2008. *Ciênc Cuid Saúde* 2010; 9(2):383-9.
7. Santos AG, Nery IS, Furtado EZL, Moura FMJSP. Perfil de mulheres em situação de abortamento atendidas em uma maternidade pública de Teresina-PI. *Rev Rene*. 2011; 12(3):494-501.
8. Merighi MAB, Jesus MCP, Domingos SRF, Oliveira DM, Baptista PCP. Ser docente de enfermagem, mulher e mãe: desvelando a vivencia sob a luz da fenomenologia social. *Rev Latino-am Enferm*. 2011; 19(1):164-70.

9. Fernandes JV, Rodrigues SHL, Costa YGAS, Silva LCM, Brito AML, Azevedo JWV, et al. Conhecimentos, atitudes e prática do exame de Papanicolau por mulheres, Nordeste do Brasil. *Rev Saúde Pública*. 2009; 43(5):851-8.
10. D'Alencar ER, Lima MMR, Mendonça PML, Custódio IL, D'Alencar BP, Lima FET. Ações de educação em saúde no controle do sobrepeso/obesidade no ambiente de trabalho. *Rev Rene*. 2010; 11(1):172-80.
11. Ministério da Saúde (BR). Secretaria de Vigilância em Saúde. *Vigitel Brasil 2010: vigilância de fatores de risco e proteção para doenças crônicas por inquérito telefônico*. Brasília: Ministério da Saúde; 2011.
12. World Health Organization (WHO). Global strategy on diet, physical activity and health. Fifty-seventh world health assembly [Internet]. 2004 [cited 2012 fev 28]. Available from: [http://www.who.int/dietphysicalactivity/strategy/eb11344/strategy\\_english\\_web.pdf](http://www.who.int/dietphysicalactivity/strategy/eb11344/strategy_english_web.pdf).
13. Ministério da Saúde (BR). Secretaria de Atenção à Saúde. Guia alimentar para a população brasileira: promovendo a alimentação saudável. Brasília: Ministério da Saúde; 2006.
14. Instituto Brasileiro de Geografia e Estatística [Internet]. Pesquisa de Orçamentos Familiares 2008-2009: antropometria e estado nutricional de crianças, adolescentes e adultos no Brasil 2010. [cited 2012 fev 28]. Disponível em: <http://www.ibge.gov.br/home/>.
15. Martino MMF. Arquitetura do sono diurno e ciclo vigília-sono em enfermeiros nos turnos de trabalho. *Rev Esc Enferm USP*. 2009; 43(1):194-9.
16. Guerrer FJL, Bianchi ERF. Caracterização do estresse nos enfermeiros de unidade de terapia intensiva. *Rev Esc Enferm USP*. 2008; 42(2):355-62.
17. Ministério da Saúde (BR). Portaria n. 1.125/GM, de 6 de julho de 2005. Dispõe sobre os propósitos da política de saúde do trabalhador para o SUS. *Diário Oficial da União, Brasília, 7 jul. 2005. Seção 1*.
18. Prazeres TJ, Navarro VL. Na costura do sapato, o desmanche das operárias: estudo das condições de trabalho e saúde das pespontadeiras da indústria de calçados de Franca, São Paulo, Brasil. *Cad Saúde Pública*. 2011; 27(10):1930-8.
19. Caetano VC, Cruz DT, leite ICG. Perfil dos pacientes e características do tratamento fisioterapêutico aplicado aos trabalhadores com LER/DORT em Juiz de Fora, MG. *Fisioter Mov* [periódico na Internet]. 2010 [cited 2012 out 10]; 23(3):451-60. Disponível em: <http://www.scielo.br/pdf/fm/v23n3/a12v23n3.pdf>
20. Ministério da Saúde (BR). Portaria n. 1.339/MS, de 18 de novembro de 1999. Lista de Doenças relacionadas ao trabalho a ser adotada como referência dos agravos originados no processo de trabalho no Sistema Único de Saúde, para uso clínico e epidemiológico. *Diário Oficial da União, Brasília, 19 nov. 1999. Seção 1*.
21. Ministério da Previdência Social (BR). Estatísticas 2010 [Internet]. [cited 2012 mar 28]. Disponível em: <http://www.previdenciasocial.gov.br/conteudoDinamico.php?id=1144>.
22. Rios MA, Nery AA, Alves MS, Jesus CS. Acidentes e doenças relacionadas ao trabalho em Jequié, Bahia, registrados no Instituto Nacional de Seguridade Social, 2008-2009. *Epidemiol Serv Saúde*. 2012; 21(2):315-24.

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