

Musculoskeletal symptoms and sociodemographic characteristics in women***Sintomas musculoesqueléticos e características sociodemográficas em mulheres****Síntomas músculo esqueléticos y características sociodemográficas en mujeres****Received: 18/12/2019****Approved: 31/03/2010****Published: 15/05/2020****Patrícia Ribeiro Marcacine¹****Marina Mendonça Emílio²****Jéssica Carvalho Lima³****Renata Martins Matos Oliveira⁴****Isabel Aparecida Porcatti de Walsh⁵**

The objective was to investigate musculoskeletal symptoms and their association with sociodemographic characteristics in women. This is a quantitative study conducted in 2014 with 1.486 women. Sociodemographic characteristics, presence of musculoskeletal syndrome, limitations in activities and the need to consult health professionals due to limitations were analyzed. It was found that 62.45% women reported musculoskeletal syndrome in at least one region of the body. However, 73.69% had no limitations and 66.35% did not consult a health professional. A greater number of regions with symptoms, limitations, and consultation with a professional were found in the younger women, which did not have a stable union. The high prevalence of musculoskeletal syndromes in women is a challenge to the public health system.

Descriptors: Womens; Health surveys; Musculoskeletal system.

Este é um estudo quantitativo realizado em 2014 com 1.486 mulheres e com o objetivo de investigar os sintomas musculoesquelético e sua associação com as características sociodemográficas em mulheres. Foram analisadas características sociodemográficas, presença de síndrome musculoesquelética, limitações nas atividades e necessidade de consultas a profissionais de saúde devido às mesmas. Foi identificado que 62,45% das mulheres relataram a síndrome musculoesquelética em pelo menos uma região do corpo. No entanto, 73,69% não apresentaram limitações nas atividades e 66,35% não consultaram profissional da saúde em função. Maior número de regiões com sintomas, limitações e consulta a profissional foi observado nas mais jovens e que não tinham união estável. A alta prevalência de síndrome musculoesquelética em mulheres é um desafio ao o sistema público de saúde.

Descritores: Mulheres; Inquéritos epidemiológicos; Sistema musculoesquelético.

Este es un estudio cuantitativo realizado en 2014 con 1.486 mujeres y con el objetivo de investigar los síntomas músculo esqueléticos y su asociación con las características sociodemográficas en mujeres. Fueron analizadas características sociodemográficas, presencia de síndrome músculo esquelética, limitaciones en las actividades y necesidad de consultas a profesionales de salud debido a las mismas. Fue identificado que 62,45% de las mujeres relataron un síndrome músculo esquelético en por lo menos una región del cuerpo. Sin embargo, 73,69% no presentaron limitaciones en las actividades y 66,35% no consultaron profesional de la salud en función. Mayor número de regiones con síntomas, limitaciones y consulta a profesional fue observado en las más jóvenes y que no tenían unión estable. La alta prevalencia de síndrome músculo esquelética en mujeres es un desafío al sistema público de salud.

Descriptores: Mujeres; Encuestas epidemiológicas; Sistema musculo esquelético.

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INTRODUCTION

Musculoskeletal symptoms (MS) are extremely relevant in people's lives and generate social impacts. They can result from temporary or permanent abnormalities of the musculoskeletal system¹, caused by trauma, infectious processes, injuries due to excessive effort, postural vices, mechanical overloads, traumatic injuries not properly treated, among other causes². They can be expressed through self-reports of pain, tingling, or numbness in any of the nine body regions, according to the theoretical framework of the Nordic Musculoskeletal Symptoms Questionnaire (QNSO)³.

These symptoms have a high prevalence, constituting a problem of great importance for public health. This condition affects millions of people worldwide⁴ and may incapacitate them to carry out their activities. The ability to perform activities is considered an indicator of health and is related to expenses and resources directed to health care⁵. Thus, it is necessary to improve care for those who suffer from MS by acquiring greater knowledge regarding their prevalence, early diagnosis, and proper management.

Musculoskeletal pain is the most prevalent type of pain and the main complain among MS⁴. Women are more affected by it than men, which could be due to hormonal aspects, lowest threshold and tolerance, as well as due to a greater ability to discriminate and describe pain^{5,6}.

According to the National Policy for Integral Attention to Women's Health, attention to this population should not be restricted to maternal and child care nor be limited to the stages of life in which the woman has the capacity to reproduce, but to the entire life cycle⁷.

The identification of MS, its intensity, the search for health professionals and the limitation in activities, associated with sociodemographic aspects, allow to know the social and health profile of women with these symptoms. This knowlegde can contribute to the effectiveness in the construction of public policies aimed at quality of life and health.

This knowledge can be constructed using data from health surveys, especially population-based studies that investigate the health profile, living conditions, health situations, the distribution of risk factors and their health habits and inequalities. This type of study allows the monitoring of health actions and programs in different population subgroups and supports the development of public health policies^{8,9}.

The aim of this study was to investigate musculoskeletal symptoms and their association with sociodemographic characteristics in women, analyzing data from the Women's Health Survey in the city of Uberaba / MG.

METHOD

Data from the Uberaba Women's Health Survey (ISA-WOMAN), a cross-sectional population-based study which analyzed a probabilistic sample of the female urban population. The sample selection occurred randomly in multiple stages. In the first stage, 24 of the 36 neighborhoods in the city were randomly selected, respecting the population proportion of each district in relation to the number of neighborhoods.

In the second stage, within each previously selected neighborhood, 25% of the census sectors were randomly selected, and the population proportion of each neighborhood was again maintained. Within the census sector chosen, houses were systematically selected from the sample interval, represented by the number of existing households in that census sector, divided by the number of women who should be interviewed. Within each neighborhood, the census sector was selected randomly in the first home visited. The following houses were considered at a sampling interval of 32 houses.

The sample of the study was composed of women, eighteen years old or older. Data collection was conducted in the urban area, in 2014.

The project was approved by the Research Ethics Committee (CEP) of the Universidade Federal do Triângulo Mineiro (UFTM), CAAE n^o 1826. The interviews were carried out by UFTM

graduation and post-graduation students, previously selected and trained by the project main researchers, in order to maintain ethics and excellence in the collection of information. Data was double checked, ensuring the quality of the records in the database.

For the present study, two instruments were used. The first was a questionnaire formulated by the researchers of the ISA-WOMAN research group, containing sociodemographic variables. The variables were age, years of study, *per capita* income, marital status (classified as "in a stable union": married and in a stable relationship; or "not in a stable union": single, separated, or widow) and whether the woman was the head of the family. MSs were evaluated using the QNSO, developed with the purpose of standardizing the measurement of reports of these symptoms and thus facilitating the comparison of results between studies³.

In the last decade, the QNSO was translated to several languages, with adequate reliability indicators for the Brazilian version. This questionnaire considers divides the human body into nine regions. The questions have multiple or binary choices regarding the presence of MS, the withdrawal from daily and instrumental activities, and the search for health professionals in the last twelve months due to the symptoms¹⁰.

Statistical analyzes were performed using IBM SPSS version 24.0 for Windows. For descriptive analysis, frequency, percentage, mean, and standard deviation were used. Subsequently, the bivariate analysis was performed using the Student's T Test and Pearson's Chi-square. The statistical significance adopted was 5%.

RESULTS

Initially, 1.556 women participated in this study, but only 1.486 composed the final sample, due to participants who did not completely respond to the questionnaires.

Their age ranged from 18 to 94 years (49.39 ± 17.38). Most women declared to be in a stable union (51.7%) and considered themselves to be the head of the family (41.4%). The mean years of formal study were 8.27 ± 5.16 and the *per capita* income was 850.90 ± 980.17 reais.

Table 1 shows the results of the QNSO with the prevalence of symptoms, difficulty to carry out activities and the need to consult a health professional, according to each region of the body and by number of regions. 62.45% of women reported MS in at least one region of the body in the past 12 months. However, 73.69% did not report any problems carrying out the activities and 66.35% did not consult health professionals due to their symptoms.

Table 1. Women according to symptoms, difficulty to perform activities, and need to consult a health professional, according to region of the body and by number of regions. Uberaba, 2014.**CHARACTERISTICS OF MUSCULOSKELETAL SYMPTOMS**

Body regions	Number of women with discomfort in each region	Number of women with difficulty in performing regular activities	Number of women who consulted a health professional	Number of regions	Number of women with discomfort and number of affected regions	Number of women with difficulty in performing regular activities	Number of women who consulted a health professional
	YES n (%)	YES n (%)	YES n (%)		n (%)	n (%)	n (%)
Cervical	272 (18.3)	111 (7.5)	142 (9.6)	Zero	558 (37.6)	1095 (73.7)	986 (66.4)
Shoulders	383 (25.8)	164 (11.0)	223 (15.0)	One	270 (18.1)	111 (7.5)	143 (9.6)
Dorsal	387 (26.0)	148 (10.0)	203 (13.7)	Two	188 (12.7)	92 (6.2)	104 (7.0)
Elbows	159 (10.7)	65 (4.4)	104 (7.0)	Three	121 (8.1)	52 (3.5)	67 (4.5)
Low back	499 (33.6)	184 (12.4)	263 (17.7)	Four	85 (5.7)	31 (2.1)	44 (3.0)
Fists/ Hands	389 (26.2)	146 (9.8)	192 (12.9)	Five	70 (47.1)	29 (2.0)	334 (22.5)
Hips/ Thighs	342 (23.0)	141 (9.5)	202 (13.6)	Six	60 (4.0)	19 (1.3)	28 (1.9)
Knees	370 (24.9)	171 (11.5)	223 (15.0)	Seven	55 (3.6)	17 (1.1)	24 (1.6)
Ankles/ Feet	329 (22.1)	137 (9.2)	179 (12.0)	Eight	25 (1.7)	12 (0.8)	11 (0.7)
-	-	-	-	Nine	54 (3.63%)	28 (1.9)	46 (3.1)

The low back region was the most cited (33.6%). It was also the area that caused more limitations in activities (12.4%) and led to the greatest demand for health professionals (17.7%). Although the shoulder was not one of the regions with the highest number of women with symptoms, it was the second cause of limitations in activities and demand for health professionals. The wrist/hand region, despite being the second with the highest number of women with symptoms, was not among those that caused the most disability or demands for a professional.

It was found that younger women were more affected by the presence of symptoms for the cervical region ($p < 0.011$) and ankle/foot ($p < 0.011$). These women sought health professionals for the dorsal ($p < 0.020$), hip/thigh ($p < 0.001$), and ankle/foot ($p < 0.028$) regions.

Educational level was not associated with the presence of symptoms, neither with impairments in carrying out activities and looking for health professionals.

Higher *per capita* income of women with elbow MS was associated with difficulty in performing activities ($p < 0.038$).

Regarding marital status, women who were not in a stable relationship were more affected by the presence of symptoms in the shoulders ($p = 0.025$) and hips / thighs ($p = 0.021$). This marital status also led to more difficulty in performing activities for the cervical ($p = 0.015$), dorsal spine ($p = 0.030$), low back (0.011), hip / thigh (0.014), and knee (0.012) regions, and these women also sought more health care professionals according to symptoms for all regions ($p < 0.05$), with the exception of the ankle/foot. Those who consider themselves heads of families were more affected by the presence of symptoms in the wrist/hand ($p = 0.042$).

Tables 2, 3, and 4, respectively, show the associations between sociodemographic variables and the presence of symptoms, difficulty in carrying out activities and search for health professionals.

Table 2. Musculoskeletal symptoms and sociodemographic aspects in women. Uberaba, 2014.

Presence of symptoms	Marital status n (%)			Head of the family n (%)			Age M (SD)		Years of study M (SD)		Income M (SD)		
	Not in a stable union	In a stable union	p	Yes	No	p	p		p		p		
Cervical	Yes	136 (18.94)	136 (18.43)	0.539	112 (18.21)	160 (18.37)	0.938	47.24 (18.7)	0.011**	7.99 (4.70)	0.272	768.48 (895.19)	0.430
	No	582 (81.06)	632 (81.57)		503 (81.79)	711 (81.63)		50.0 (16.92)		8.34 (5.28)		816.88 (1004.04)	
Shoulders	Yes	204 (53.26)	179 (46.74)	0.025*	221 (25.37)	162 (26.34)	0.674	49.45 (18.96)	0.941	8.02 (5.02)	0.270	779.18 (946.90)	0.533
	No	514 (46.60)	589 (53.40)		650 (74.63)	453 (73.66)		49.37 (16.8)		8.35 (5.21)		815.50 (9992.59)	
Dorsal	Yes	203 (52.45)	184 (47.55)	0.058	219 (25.14)	168 (27.32)	0.347	49.04 (18.46)	0.644	8.16 (94.74)	0.638	763.93 (899.36)	0.326
	No	515 (46.86)	584 (53.14)		652 (74.86)	447 (72.68)		49.51(16.99)		8.30 (5.30)		821.00 (1007.93)	
Elbows	Yes	87 (12.15)	72 (9.38)	0.087	91 (10.45)	68 (11.06)	0.708	48.94 (18.48)	0.732	7.81 (4.79)	0.239	875.99 (1286.23)	0.344
	No	631 (87.85)	696 (90.62)		780 (89.55)	547 (88.94)		49.44 (17.25)		8.32 (5.20)		797.79 (938.00)	
Low back	Yes	258 (35.93)	241 (31.38)	0.063	288 (33.07)	211 (34.31)	0.617	48.93(18.90)	0.467	8.17 (4.74)	0.604	806.84 (955.69)	0.984
	No	460 (64.07)	527 (68.62)		583 (66.93)	404 (65.69)		49.62 (16.56)		8.32 (5.36)		805.77 (993.75)	
Fists/ Hands	Yes	204 (28.41)	185 (24.09)	0.058	245 (28.13)	144 (23.41)	0.042*	48.16 (18.97)	0.105	8.28 (4.92)	0.958	783.37 (976.29)	0.595
	No	514 (71.59)	583 (75.91)		626 (71.87)	471 (76.59)		49.83 (16.77)		8.26 (5.24)		814.21(982.76)	
Hips/thighs	Yes	184 (25.63)	158 (20.58)	0.021*	204 (23.42)	138 (22.44)	0.658	48.54 (19.54)	0.302	8.33 (5.06)	0.77	819.78 (1086.55)	0.800
	No	534 (74.37)	610 (79.42)		667 (76.58)	477 (77.56)		49.64 (16.68)		8.25 (5.19)		802.04 (947.38)	
Knees	Yes	195 (27.16)	175 (22.79)	0.051	222 (25.49)	148 (24.07)	0.532	48.64 (18.65)	0.343	8.01 (4.79)	0.273	776.32 (879.16)	0.501
	No	523 (72.84)	593 (77.21)		649 (74.51)	467 (75.93)		49.64 (16.94)		8.36 (5.27)		815.99 (1012.36)	
Ankles/ Feet	Yes	158 (22.01)	171 (22.27)	0.904	203 (23.31)	126 (20.49)	0.197	47.24 (18.78)	0.011**	7.99 (4.70)	0.272	768.48 (895.19)	0.430
	No	560 (77.99)	597 (77.73)		668 (76.69)	489 (79.51)		50.0 (16.92)		8.34 (5.28)		816.88 (1004.04)	

Caption: n: Frequency; M: Average; SD: Standard Deviation; * Pearson's chi-square (p<0.05); Student's t test (p<0.05).

Table 3. Sociodemographic aspects and difficulty in performing activities due to musculoskeletal symptoms in women. Uberaba, 2014.

Difficulty performing activities	in	Marital status			Head of the family			Age		Years of study		Income	
		n (%)	n (%)	p	Yes	No	p	M (SD)	p	M (SD)	p	M (SD)	p
		Not in a stable union	In a stable union										
Cervical	Yes	66(59.48)	45(40.52)	0.015*	46 (7.48)	65 (7.46)	0.990	47.96 (18.17)	0.369	8.49 (5.11)	0.640	690.99 (696.85)	0.199
	No	652(47.42)	723 (52.58)		569 (92.53)	806 (92.54)		49.51 (17.31)		8.25 (5.16)		815.46 (999.91)	
Shoulders	Yes	91 (55.49)	73 (44.51)	0.051	69 (11.22)	95 (10.91)	0.850	50.03 (18.79)	0.617	7.81 (5.27)	0.231	779.73 (1074.72)	0.715
	No	627 (47.43)	695 (52.57)		546 (88.78)	776 (89.09)		49.31 (17.20)		8.30(5.20)		809.42 (968.88)	
Dorsal	Yes	84 (56.77)	64 (43.23)	0.03*	66 (10.73)	82 (9.41)	0.404	49.61 (17.77)	0.872	7.93 (4.78)	0.407	747.67 (743.67)	0.056
	No	634 (47.38)	704 (52.62)		549 (89.27)	789 (90.59)		49.37 (17.34)		8.31 (5.30)		812.62 (1003.71)	
Elbows	Yes	38 (58.46)	27 (41.54)	0.094	27 (4.39)	38 (4.36)	0.980	47.57 (19.27)	0.388	8.40 (5.03)	0.837	1033.37 (1422.89)	0.038**
	No	680 (47.85)	741 (52.15)		588 (95.61)	833 (95.64)		49.47 (17.29)		8.26 (5.17)		795.70 (955.06)	
Low back	Yes	105 (57.07)	79 (42.93)	0.011*	74 (12.03)	110 (12.63)	0.731	49.84 (20.0)	0.706	7.66 (5.00)	0.09	760.75 (772.20)	0.503
	No	613 (47.08)	689 (52.92)		541 (87.97)	761 (87.37)		49.33 (17.13)		8.35 (5.18)		812.57 (1007.00)	
Fists/ Hands	Yes	79 (54.11)	67 (45.89)	0.140	50(8.13)	96(10.02)	0.065	48.05 (19.18)	0.326	8.26 (5.38)	0.988	886.20 (1311.92)	0.299
	No	639 (47.69)	701 (52.31)		565(91.87)	775(88.98)		49.54 (17.17)		8.27 (5.14)		797.37 (937.78)	
Hips/ Thighs	Yes	82 (58.17)	59 (41.83)	0.014*	50(8.13)	91(10.45)	0.133	47.49 (19.66)	0.172	8.74 (5.12)	0.247	946 (1379.58)	0.075
	No	636 (47.29)	709 (52.71)		565(91.87)	780(89.55)		49.59 (17.12)		8.22 (5.16)		791.41 (928.46)	
Knees	Yes	98 (57.31)	73 (42.69)	0.012*	71(11.54)	100(11.48)	0.970	48.65 (18.81)	0.554	8.04(4.94)	0.533	886.52 (1237.84)	0.255
	No	620 (47.15)	695 (52.85)		544(88.46)	771(88.52)		49.49 (17.19)		8.30 (5.19)		795.63 (942.19)	
Ankles/ Feet	Yes	72 (52.55)	659 (47.45)	0.298	51(8.29)	86(9.87)	0.299	47.03 (18.79)	0.095	7.62 (4.80)	0.124	798.97 (1025.75)	0.929
	No	620 (54.42)	703 (45.58)		564(91.71)	785(90.13)		49,63 (17.22)		8.33 (5.19)		806.86 (976.52)	

Caption: n: Frequency; M: Average; SD: Standard Deviation; * Pearson's chi-square (p<0.05); Student's t test (p<0.05).

Table 4. Search for a health professional due to musculoskeletal symptoms, related to sociodemographic aspects in women. Uberaba, 2014.

Search for a professional		Marital status n(%)			Head of the family n(%)			Age M(SD)		Years of study M(SD)		Income M(SD)	
		Not in a stable union	In a stable union	p	Yes	No	p		p	M (SD)	p	M (SD)	p
Cervical	Yes	85 (59.86)	57 (40.14)	0.004*	64 (10.41)	78 (8.96)	0.349	48.29 (18.07)	0.427	8.11 (4.79)	0.696	686.56 (588.82)	0.127
	No	633 (47.10)	711 (52.90)		551 (89.59)	793 (91.04)		49.51 (17.31)		8.29 (5.20)		818.53 (1012.86)	
Shoulders	Yes	134 (60.09)	89 (39.91)	0.001*	97 (15.77)	126 (14.49)	0.487	48.83 (19.24)	0.602	8.24 (5.17)	0.939	762.04 (943.64)	0.467
	No	584 (47.75)	679 (52.25)		518 (84.23)	745 (85.50)		49.49 (17.03)		8.2 (5.16)		813.94(987.42)	
Dorsal	Yes	114 (56.16)	89 (43.84)	0.016*	88 (14.31)	115 (13.20)	0.541	46.75 (18.14)	0.020**	8.15(4.67)	0.725	724.94(666.23)	0.204
	No	604 (47.08)	679 (52.92)		527 (85.69)	756 (86.80)		49.81 (17.23)		8.29 (5.23)		819.02(1021.52)	
Elbows	Yes	61 (58.65)	43 (41.35)	0.029*	45 (7.32)	59 (6.77)	0.686	48.80 (19.27)	0.719	7.94 (4.84)	0.507	949.33 (1477.05)	0.123
	No	657 (51.25)	725 (48.75)		570 (92.68)	812 (93.23)		49.43 (17.23)		8.30(5.18)		795.31(932.60)	
Low back	Yes	148 (56.28)	115 (43.72)	0.004*	116 (18.86)	147 (16.88)	0.323	47,58 (18.51)	0.062	8.26 (4.89)	0.985	741.49(715.97)	0.239
	No	570 (46.61)	653 (53.39)		499 (81.14)	724 (83.12)		49.78 (17.11)		8.27 (5.18)		820.00(1028.81)	
Fists/ Hands	Yes	112(58.33)	80 (41.67)	0.003*	77 (12.52)	115 (13.20)	0.699	47,-.74 (19.21)	0.159	8.26 (5.18)	0.986	875.97 (1185.20)	0.290
	No	606 (46.83)	688 (53.17)		538 (87.48)	756 (86.80)		49,64 (17.08)		8.27 (5.18)		795.73(946.71)	
Hips/ Thighs	Yes	112 (55.45)	90 (44.55)	0.029*	76 (12.36)	126 (14.47)	0.243	45.76 (19.18)	0.001**	8.51 (4.96)	0.462	826.68 (1207.20)	0.749
	No	606 (48.76)	678 (51.24)		539 (87.64)	745 (85.53)		49.46 (17.02)		8.23 (5.19)		802.88(940.63)	
Knees	Yes	124 (55.61)	99 (44.39)	0.018*	87 (14.15)	136 (15.61)	0.435	48.04 (19.01)	0.208	8.15(4.92)	0.713	803.12 (1119.29)	0.901
	No	594 (47.03)	669 (52.97)		528 (85.85)	735 (84.39)		49.63 (17.07)		8.29(5.20)		806.66(954.82)	
Ankles/ Feet	Yes	93 (51.97)	86 (48.03)	0.299	68 (11.06)	111 (12.74)	0.325	46.72 (18.81)	0.028**	7.74 (4.75)	0.144	734.15 (891.06)	0.295
	No	625 (47.82)	682 (52.18)		547 (88.94)	760 (87.26)		49.76 (17.15)		8.34 (5.21)		816.03(992.43)	

Caption: n: Frequency; M: Average; SD: Standard Deviation; * Pearson's chi-square (p<0.05); Student's t test (p<0.05).

DISCUSSION

Actions and strategies aimed at comprehensive health care for women depend, in large part, on the identification of vulnerabilities that should be prioritized by public health policies. Knowledge is necessary about the characteristics related to health problems that impair the wellbeing and the quality of life of this population. In this context, health surveys are essential for the study of habits and health conditions in representative samples of populations.

This study indicated that 62.45% of women reported MS in at least one region in the past 12 months. Studies address that the prevalence of MS in the female population results from biological and behavioral aspects (hormones, inequalities related to height, strength, aerobic conditions, pain circuits, variations in the central nervous system)^{5,11}.

Even so, the large number of women with reports of MS can be attributed to their greater perception of the signs of disease¹², as well as the fact that they have a higher frequency of musculoskeletal and visceral pain, as well as reporting pain as a symptom in a consultation to the health professional¹³. However, 73.69% of those who reported symptoms denied being unable to perform activities and 66.35% did not consult a health professional due to the pain.

The fact that women continue to develop their activities independent of MS may be related to high self-efficacy, which would lead them to be more persistent and, in general, to maintain most of their activities, despite the symptoms¹⁴. Thus, it is necessary to make women aware of their pains and limitations, of the importance of searching the appropriate treatment, and of their self-responsibility in the face of intervention and care, so that they can express verbally their complaints and symptoms. It is also essential to approach the processes related to the construction of the self-efficacy meaning presented by the woman.

Considering the results, these women may have a higher level of resilience, which is associated with higher levels of pain acceptance and adaptation to it, regardless of its length. Resilience is related to the ability to adapt to different situations that generate stress, even without a clear understanding of them. When there are high levels of acceptance and adaptation to painful conditions, resilience increases, generating positive reflexes in the process of preventing emotional stress¹⁵. In this context, one of the themes that should be discussed with this population, during therapeutic interventions, must be resilience and what guides it.

However, it must be considered that these results may also indicate a lack of adequate care for their health, which may lead these women to suffer long-term damage, since these symptoms refer to the last 12 months. This possibility, if it leads to the lack of proper treatment, can negatively impact their quality of life^{15,16}.

Difficulties to perform activities and the search for professionals can occur with symptoms of moderate or high intensity. In such cases, the possibilities of dealing with the problem may be lower. Thus, health professionals must be prepared to care for patients with MS, they need to have a broad perspective both during evaluation and in treatment, since pain, especially chronic, is influenced by organic, psychological, and social aspects¹⁷. Thus, it is essential to analyze the context in which women are inserted.

The lower back region had the largest number of pain reports, caused more limitations in activities, and led to a greater demand for health professionals. However, only 52.71% of the 263 women who had symptoms in this region sought health professionals. In a systematic review regarding the search for determining factors for the search for health services, it was found that less than 60% of people with lower back pain seek treatment¹⁸. There is a high prevalence of lower back pain, both in Brazil and in the world, and it corresponds to the biggest cause of disability and removal from work activities¹⁷. In Brazil, information from the 2013 National Health Survey shows that 18.5% of the Brazilian population reported chronic back pain, 15.5% of whom were men and 21.1%, women^{17,19,20}.

The fact that women have a higher prevalence has been explained by the performance of more intense household chores, carried out in non-ergonomic positions, and exposing these women to repetitive and to chores that require speed. In addition, there are anatomical and

functional characteristics, such as being shorter, with less muscle mass, less bone mass, more fragile joints, and less adaptability to strenuous physical effort. All of these characteristics may result in more spine overload.

Pregnancy can also be an risk factor, since there is an increase in the flexibility of the ligaments of the spine and hips, lordosis and muscle contractures (due to the increase in weight), and changes in posture (due to the growth of the fetus). In the postpartum period, there are also changes related to postural inadequacies when breastfeeding due to weight of the child, among other factors that can be considered risk factors^{19,20}.

In the present study, difficulties related to spine symptoms were present in 12.4% of women. This result is similar to that of another investigation that highlighted that difficulties in patients with chronic low back pain are between 11% to 76%. This great variation is due to the concepts of disability adopted and to the different methods used to measure this phenomenon²⁰. In this study, the QNSO was used, but there are other instruments developed for the evaluation of the lumbar region^{20,21}. All instruments can provide subsidies for the health professional to identify symptoms, contributing to the most appropriate management of pain and disability, and for choosing more effective therapeutic approaches.

Regarding age, it was found that younger women had a higher number of symptoms in the cervical region and ankles/feet, as well as a greater demand for professionals and more disability in the cervical, hips/thighs and ankles/feet regions. In a survey conducted considering data from the National Health Survey (PNS) of 2013, it was found that the prevalence of chronic spine problems increases with age, with the highest frequencies being found among subjects with more than 60 years of age²². A study carried out in the medical archive sector of the Butantã Health Center (CSEB) pointed out that the chance of individuals over 40 years of age to seek health care for musculoskeletal problems is higher²³.

However, a previous study reported that an increasing number of young university students has been suffering from pain in the spine and other joints²⁴. What leads to consider that musculoskeletal pain affects all ages and any point in life. Thus, care with the musculoskeletal system must be encouraged at all ages, especially at the productive age, and must be implemented in a way that women have self-perception and self-responsibility about it.

Years of study were not associated with the presence of MS, difficulties in performing activities and with the search for health professionals. Differing from these results is a cross-sectional study with women between 40 and 60 years old, carried out in the Family Health Strategy program of a Primary Healthcare Unit in São Paulo, which indicated that pain levels were higher for women with a low educational level, and that adults with no formal education or who did not complete elementary school reported more chronic back problems²⁵. Epidemiology and factors associated with MS analyzed in a broad way are scarce. Studies are dedicated to the assessment of pain, thus limiting the understanding of the characteristics of these symptoms and their implications for wellbeing, especially in women.

Women who were not in a stable union, for some regions, had more difficulties in performing activities and greater impairment in terms of the number of symptoms and search for health professionals. Thus, the familial, economic, and social responsibilities of women who are in a stable relationship may raise the hypothesis that this type of relationship could be preventive regarding the presence of symptoms and the decreased ability to perform activities. This, however, has not been proven.

Although, often, family and children represent a double journey that negatively impacts the organism by imposing physical and mental overload and stress, the family can also represent social support, helping to reduce overload. Considering the literature, studies have shown beneficial effects of living with a partner during chronic illness^{26,27}. Thus, marital status and family composition are paradoxical factors and need further examination, considering that

family dynamics can be a risk factor for some and protective factor for others, depending on the quality of these relationships and the level of affection and satisfaction with them.

Considering the high prevalence and of the MS presented by women and the fact that it is a chronic problem, the need for a comprehensive and resolute approach oriented to the prevention, treatment, and appropriate management of these conditions stands out, especially, due to its prevalence in economically vulnerable social groups, and to their association with restricted activities and to a greater use of health services. That suggests that these symptoms may have an impact on the professional and social lives of these women, contributing to the decrease in quality of life.

It is necessary to consider that social contexts can favor the presence of MS, including the fact that the presence of women in the labor market has increased considerably. Associated with their work activities, there is home and family care, and many are also financially responsible for their homes.

It is also necessary to consider the precariousness of low-paid work, among other situations that reflect on women's health^{5,28}. In addition to the payment, workers are expected, even with the presence of painful symptoms and with the limitations arising from this situation, to continuously perform their work activities, generating a reduction in their productive performance and causing impacts on their physical, mental, social, and even financial health²⁹.

CONCLUSION

Despite the high prevalence of MS, many women are not disabled and do not seek health professionals. Women with lower age means and who were not in a stable union were associated with a higher number of regions with symptoms, difficulties to perform activities and in the search for health professionals.

These results are important, particularly since the public health system is not prepared to meet the needs of this population, such as prolonged, intensive, and costly care.

A limitation of this study is the fact that it did not analyze the association of paid work with MS, which could, in part, answer questions regarding the influence of the professional work on symptoms.

However, the information obtained by this study contributes to the adoption of strategies aimed at promoting comprehensive health care for women, considering the vulnerable groups that are more likely to have functional limitations due to MS. To change this situation, a greater understanding of musculoskeletal symptoms and their determinants will be necessary, as well as an epidemiological and interdisciplinary perspective.

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CONTRIBUTIONS

Isabel Aparecida Porcatti de Walsh and **Patrícia Ribeiro Marcacine** contributed to the conception, design, analysis and interpretation of data, writing and review. **Jéssica Carvalho Lima**, **Marina Mendonça Emílio** and **Renata Martins Matos Oliveira** participated in data interpretation, writing and review.

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