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RESEARCH ARTICLE

Epidemiology of musculoskeletal complaints and diseases in Qatar: A cross-sectional study

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ABSTRACT

Background: Musculoskeletal (MSK) conditions are considered a significant public health problem on account of their high prevalence in communities worldwide and their pervasive impact. Knowledge of the epidemiology of MSK symptoms and diseases is lacking in Qatar. Obtaining this information will guide local health policymakers in the future strategic planning of the health budget.

Objective: To estimate the prevalence rate of MSK disorders in the Qatari population above 15 years of age using the Community Oriented Program for the Control of Rheumatic Disease (COPCORD) survey.

Methods: This cross-sectional study targeted 1000 Qatari participants, including 500 males and 500 females. A door-to-door survey was conducted using the Arabic version of the COPCORD questionnaire with the help of research assistants. Participants with positive surveys were asked to visit Hamad General Hospital Rheumatology outpatient clinics for clinical evaluation by a rheumatologist. When necessary, laboratory testing and X-rays were conducted to confirm any MSK diagnosis.

Results: A total of 1239 (males, 50.8%) Qatari individuals randomly selected from the different municipalities of Qatar completed the COPCORD survey. Among the participants, 563 (45.4%) screened positive for MSK pain. Knee pain (24.5%) and back pain (23.3%) were the most common sites of pain, and both conditions showed no gender predominance ($p = 0.073$ and 0.108, respectively). Shoulder, wrist, hand, hip, and neck pain were significantly predominant in females ($p < 0.001$ for all). A total of 237 MSK disorders were diagnosed in 196 (15.8%) participants, including 181 degenerative joint diseases, 52 soft-tissue rheumatism

conditions, and 4 autoimmune inflammatory disorders. Among degenerative joint diseases, knee osteoarthritis (6.4%) was the most common. Among soft-tissue rheumatic conditions, muscular lower back pain (1.9%), myofascial neck pain (0.64%), generalized body pain (0.32%), and shoulder tendinitis (0.7%) were the most common diseases. The autoimmune inflammatory disorders identified included rheumatoid arthritis (n = 2), connective tissue disease (n = 1), and inflammatory bowel disease-associated arthritis (n = 1).

Conclusion: The overall prevalence rate of MSK disorders in this small cross-sectional cohort of Qatari individuals was 15.8%. Knee pain (24.5%) and knee osteoarthritis (6.4%) were the most common MSK complaints and diagnosis in the studied Qatari population. This study guides future efforts directed toward the prevention and management of MSK diseases. Further studies with a larger sample size are needed to verify the findings.

Keywords: rheumatic diseases, musculoskeletal complaints, COPCORD survey

INTRODUCTION

Musculoskeletal (MSK) conditions are considered a significant public health problem on account of their high prevalence in communities worldwide and their pervasive impact. These diseases encompass a spectrum of conditions, including those with acute onset and short duration, such as traumatic and infection-induced conditions, to those with chronic characteristics, such as osteoarthritis, rheumatoid arthritis, and spondyloarthropathies. MSK disorders are the most common cause of severe long-term pain and physical disability and affects hundreds of millions of patients globally.[1] In the Ontario Health Survey, for example, MSK conditions caused 40% of all chronic conditions, 54% of all long-term disabilities, and 24% of all restricted activity days.[2] In surveys conducted in Canada, the United States (US), and Western Europe, the prevalence of physical disabilities caused by MSK conditions has been repeatedly estimated to be 4%–5% of the adult population.[3]

The burden of MSK disorders is expected to increase in succeeding years because of the aging of the world's population, increased prevalence of obesity, and lifestyle changes, such as lack of physical activity. In recognition of the public health importance of these conditions, the United Nations and World Health Organization (WHO) declared 2000–2010 to be the decade for preventing and treating rheumatic diseases.[4,5] Given the personal and societal burden presented by MSK conditions, the Community Oriented Program for the Control of Rheumatic Diseases (COPCORD) was established in 1981 by the WHO and the International League of Associations for Rheumatology (ILAR) to compile data on the epidemiology of rheumatic-musculoskeletal symptoms/disorders in developing countries. This program aims to promote health practitioners' awareness regarding these conditions. Several countries, such as Australia,[6] Bangladesh,[7] and China,[8] have gained insights into the burden of rheumatic conditions using the COPCORD model. Countries from the Arab world that have applied the COPCORD model include Egypt,[9] Kuwait,[10] and Lebanon.[11]

The prevalence of MSK disorders in Qatar has never been estimated. Qatar is located in the Arabian Gulf and has a total estimated land area of 11,437 km^2. The total population of the country, according to a census performed in 2018, was 2,581,000, which was distributed over seven municipalities, including Doha, Al-Rayyan, Al-Khor, Al-Shamal, Al-Da'ayen, Al-Wakra, and Umm Salal. This figure was published by the Ministry of Development Planning and Statistics. Qatari citizens constitute approximately 12% (204,000) of the entire population. The remaining population is composed of expatriates. Knowledge of the epidemiology of MSK symptoms and diseases is lacking in Qatar. Thus, we intended to conduct a national-scale population-based study on MSK conditions in the country by applying the COPCORD model. Our objectives are to estimate the prevalence rate of MSK diseases among Qatari individuals aged over 15 years and to explore the distribution of these diseases by age and gender. The information obtained from our analysis can guide local health policymakers in the proper future strategic planning of the health budget.

MATERIAL AND METHODS

COPCORD Questionnaire

The present cross-sectional study aimed to detect the prevalence rate of MSK diseases in Qatar according to the COPCORD methodology, which includes two phases. The first phase was completed by conducting face-to-face interviews with individuals from randomly selected homes in different

municipalities of Qatar. The first household in each municipality was randomly selected. Each fourth household was also surveyed. The person surveyed was decided by random sampling until the required sample size was achieved. Sixteen research assistants (males, 6; females, 10) were trained to conduct the interview and use the validated Arabic version of the COPCORD screening questionnaire. The aim of these interviews was to detect cases of MSK pain during the last 7 days in the community. Participants who answered "yes" to the question "Have you suffered from any joint pain in the last 7 days?" were considered positive respondents.

In the second phase of the COPCORD methodology, positive respondents were scheduled for consultation with a rheumatologist at Hamad General Hospital outpatient clinics within 7 days from the interview. When necessary, blood tests and X-rays were performed to confirm the diagnosis. The two phases were conducted over the course of 1 year (March 2012 – March 2013). The MSK diagnosis of participants who were screened positive in the questionnaire but were unable to come to the rheumatology clinic was obtained from their electronic health records to minimize the dropoff rate. Qatar has a governmental hospital-based health system, and each citizen has an electronic record for any acute or chronic illness.

The Arabic version of the WHO-ILAR COPCORD Core Questionnaire, which was validated in Kuwait, was used in this study.[12] The questionnaire consisted of seven sections (A – G). Sections A and B collected data on basic demographics (i.e., age, gender, and marital status), education, and employment status. The main section of the COPCORD questionnaire, which is Section C, collected data related to MSK issues (positive respondents) via questions on current and past MSK complaints, including pain, pain upon pressure, swelling, stiffness, and pain severity, in nine body locations (i.e., shoulders, wrists, hands, knees, hips, ankles, toes, neck, and back). Pain severity was assessed by using two methods, namely, a visual analog scale (0 – 10) and self-reports on whether the pain is mild, moderate, severe, or very severe. Sections D and E collected data on functional status and daily activities. Finally, Sections F and G collected data on medications intake and basic body measurements (i.e., weight and height). The appendix shows the validated Arabic version of the COPCORD questionnaire.

Sample Size Determination

The target sample size is approximately 1000 Qatari individuals above 15 years of age from different municipalities of Qatar. The literature indicates that the overall prevalence of MSK disorders in this specific age group is 18% (range, 15% – 25%). Using a precision of estimate (margin of error) of 3% and a level of confidence ($1-\alpha$) of 99%, the sample size required for this study would be 1087 participants. The sample size was increased by 10% – 15% to provide additional gains in estimating the various subtypes of MSK disorders and assess the gender-specific distribution of MSK disorders in this population. The proposed sample size represents approximately 0.6% of all Qatari citizens above 15 years of age at the time of the study. An age of 15 years and above is the cutoff used in Qatar for the adult age group. Any Qatari citizen (male or female) above 15 years of age and residing in Qatar could be included in this study.

Ethical Approval

The study protocol was approved by the Institutional Review Board of Hamad Medical Corporation (MRC 11054/11) and Weill Cornell Medicine—Qatar (14-00081). This work was sponsored by the Medical Research Center at Hamad Medical Corporation. Each participant aged 18 years or above or the parent/guardian of younger respondents provided written informed consent prior to receiving a copy of the COPCORD questionnaire. A waiver of informed consent was also obtained prior to reviewing the subjects' electronic records.

Statistical Analysis

Data were analyzed using Statistical Package for Social Sciences (v.21). The national prevalence of rheumatic disorders was calculated using rheumatologists' diagnosis. Percentages, means, and standard deviations were computed to describe pain and disability among participants with MSK diseases. Associations between gender and each MSK diagnosis and pain site were examined and assessed using Pearson's chi-squared test or Fisher's exact test as appropriate in the case of a small cell frequency.

RESULTS

Participant Characteristics

A total of 1239 participants were randomly selected from seven municipalities (Doha, 54.5%; Al-Khor,

26.2%; Umm Salal, 10.3%; Al-Rayyan, 5.9%; Al-Da'ayen, 1.3%; Al-Shamal, 0.9%; Al-Wakra, 0.7%) in Qatar, interviewed, and screened using the COPCORD questionnaire. The male-to-female ratio of the participants was 1:1, and the mean age was 42.3 ± 16.2 years (range, 15 – 96 years). Approximately 69% of the participants were married and had at least a high school education. The socioeconomic characteristics of the participants are summarized in Table 1.

Prevalence of Musculoskeletal Complaints

The prevalence rate of any MSK complaint was 45.4% (563/1239). Knee pain (24.5%) and back pain (23.3%) were the most common sites of MSK pain complaints, and both conditions showed no gender predominance ($p = 0.073$ and 0.108, respectively). Wrist, hand, shoulder, neck, hip, and toe pain were predominant in females with significant p values. Wrist pain (7.7%) was the most uncommon cause of MSK pain among the participants. The mean pain severity was 5.3 out of a scale of 10 at the 95% CI (5.14 – 5.61). Table 2 summarizes the prevalence of MSK pain at different sites distributed according to gender.

Table 1. Socioeconomic and demographic characteristics of the study sample.

Variables	
Gender N (%)	
Male	630 (50.8%)
Female	609 (49.2%)
Age mean (Std. Deviation)	42.3 (16.2)
Male	41 (16.4)
Female	42.7 (16)
BMI mean (Std. Deviation)	26.9 (10.2)
Male	28.3 (7.5)
Female	25.4 (12.3)
Marital status N (%)	
Single	232 (18.7%)
Married	855 (69.0%)
Widowed	65 (5.2%)
Divorced	27 (2.2%)
Engaged	1 (0.1%)
Missing	59 (4.7%)
Education N (%)	
Not educated	77 (6.2%)
Read & write	51 (4.0%)
Primary school	89 (7.1%)
Secondary school	167 (13.5%)
High school	428 (34.5%)
College	427 (34.4%)
Employed N (%)	664 (48.1%)
Male	431 (65%)
Female	233 (35%)
Municipalities N (%)	
Doha	676 (54.5%)
Al-khor	325 (26.2%)
Al-Rayyan	73 (5.9%)
Al-Wakra	9 (0.7%)
Al-Daayen	16 (1.3%)
Al-Shamal	12 (0.9%)
Umm Salal	128 (10.3%)

Prevalence of Musculoskeletal Disorders

A total of 563 (45.4%) participants were screened positive for any MSK symptom in the COPCORD questionnaire, and 200 participants (16.1%) were called for a rheumatology appointment. The remaining participants did not respond to our phone calls. Seventy-three participants attended their rheumatology appointments; the remaining participants were unable to attend their appointments for various reasons (e.g., international travel, symptoms resolved, or consulted with a physician). The diagnosis of those participants who did not respond to phone calls or refused to attend their rheumatology appointment was obtained from their electronic medical records. A total of 237 MSK disorders were diagnosed in 196 participants. The overall prevalence rate of MSK disorders was 15.8% (196/1239). In general, MSK diseases were slightly more prevalent in females (132/237; 55.6%) than in males. The majority of MSK diseases noted were degenerative in origin. One hundred eighty-one degenerative joint diseases were confirmed; knee osteoarthritis (6.4%) was the most common disease, followed by lumbar spondylosis (4%) and cervical spondylosis (2.3%). Lumbar spondylosis was significantly more common in females ($p = 0.015$) than in males. Fifty-two soft-tissue rheumatic conditions were detected, including muscular lower back pain (1.9%), myofascial neck pain (0.64%), generalized body pain (0.32%), and shoulder tendinitis (0.7%). Two females were diagnosed with rheumatoid arthritis, one subject was diagnosed with connective tissue disease, and one case was diagnosed with inflammatory bowel disease-associated arthritis. Table 3 displays the total and gender-specific prevalence rates of MSK disorders in Qatar for the period 2012 – 2013.

DISCUSSION

This work represents the first community-based study that provides estimates of the prevalence rate

Table 2. Total and gender-specific prevalence rates of musculoskeletal pain in Qatar for the period 2012 – 2013 with *p* values of both genders.

Site	Total N (%)	Male	Female	*p* value
Shoulders	197 (15.9)	79 (6.4)	118 (9.5)	0.001
Wrists	96 (7.7)	28 (2.3)	68 (5.5)	0.000
Hands	136 (10.9)	34 (2.7)	102 (8.2)	0.000
Hips	133 (10.7)	41 (3.3)	92 (7.4)	0.000
Knees	304 (24.5)	141 (11.4)	163 (13.2)	0.073
Ankles	156 (12.5)	68 (5.5)	88 (7.1)	0.052
Toes	124 (10.0)	36 (2.9)	88 (7.1)	0.000
Neck	173 (13.9)	58 (4.7)	115 (9.3)	0.000
Back	289 (23.3)	135 (10.9)	154 (12.4)	0.108
Others	115 (9.2)	28 (2.3)	87 (7.0)	0.000
Total	1723	648	1075	

of MSK diseases and complaints in the Qatari population using the COPCORD model. Approximately 20 countries worldwide have used the COPCORD questionnaire to estimate the prevalence of MSK diseases and complaints. The prevalence rates of MSK diseases determined in the present work varied significantly compared with previous COPCORD studies, which ranged from 5.2% in Malaysia[13] to 19.5% in Australia.[6] The overall prevalence rate of MSK diseases in Qatar is within this range and quite close to the rate in Lebanon (15%).[11] This variation in prevalence rates between COPCORD studies may be attributed to several factors, including differences in methodologies used. For example, the rate of MSK conditions in Brazil is 7.2%[14]; however, this study investigated the prevalence rate of only four diseases, namely, osteoarthritis (4.14%), fibromyalgia (2.5%), rheumatoid arthritis (0.46%), and systemic lupus erythematosus (0.098%). Thus, the overall prevalence rate of MSK disorders in Brazil may be underestimated.

In the Lebanon model, positive respondents were examined by a rheumatologist visiting the participants' homes[11]; in other studies, participants who were screened positive in phase one were called for appointments in rheumatology clinics. A fairly large

Table 3. Total and gender-specific prevalence rates of musculoskeletal disorders in Qatar for the period 2012 – 2013 with *p* values of both genders.

Diagnosis	Total N (%)	Male (%)	Female (%)	*p* value
Knee osteoarthritis	80 (6.4)	37 (3.0)	43 (3.5)	0.395
Cervical disc prolapses	7 (0.6)	3 (0.3)	4 (0.2)	0.738
Cervical spondylosis	29 (2.3)	17 (1.4)	12 (1.0)	0.397
Lumbar disc prolapses	15 (1.2)	8 (0.6)	7 (0.6)	0.846
Lumbar spondylosis	50 (4.0)	17 (1.4)	33 (2.7)	0.015
Low back pain	23 (1.9)	11 (0.9)	12 (1.0)	0.620
Myofascial pain	8 (0.64)	1 (0.1)	7 (0.6)	0.030
Generalized body aches	4 (0.32)	1 (0.1)	3 (0.2)	0.300
Fibromyalgia	2 (0.16)	0 (0)	2 (0.2)	0.150
Trochanteric bursitis	3 (0.24)	0 (0)	3 (0.2)	0.078
Shoulder pain	9 (0.7)	9 (0.7)	0 (0)	0.003
RA	2 (0.16)	0 (0)	2 (0.2)	0.150
Carpal tunnel syndrome	1 (0.08)	0 (0)	1 (0.1)	0.309
Gout	1 (0.08)	1 (0.1)	0 (0)	0.309
Connective tissue disease	1 (0.08)	0 (0)	1 (0.1)	0.309
IBD-arthritis	1 (0.08)	1 (0.1)	0 (0)	0.309
Plantar fasciitis	1 (0.08)	0 (0)	1 (0.1)	0.309
Total	237	105 (8.4)	132 (10.6)	

number of positive respondents in these studies did not attend their appointments, similar to findings in Malaysia[13] and the present study. This issue may lead to underestimation of the true prevalence rate. The number of connective tissue cases was extremely low in all studies conducted, including ours. In the Australian and Malaysian studies, no connective tissue case was identified. In general, the global prevalence of connective tissue diseases is considered low. Some reports from the US revealed a prevalence of 1 – 15 cases per 1000 persons.[15] Thus, a larger sample size should be used to detect more cases of connective tissue disease and inflammatory arthritis. Table 4 shows a comparison of the prevalence rates of total MSK and selected diseases in Qatar, Lebanon, Brazil, Australia, and Malaysia.

The prevalence of MSK complaints in our cohort (45%) is among the highest observed in the COPCORD studies performed thus far. The prevalence of MSK pain in other countries varies from 6.6% (Kuwait)[10] and 14.9% (Vietnam)[16] to 41.9% (Iran)[17] and 55% (Australia).[6] This variation may be due to differences in the manner the COPCORD survey was implemented. For instance, in Kuwait, participants reporting no MSK pain were identified and followed-up over a period of 1 year by initiating contact with them every 2 weeks. Some studies only surveyed pain during last 7 days and did not include past resolved pain. Variations in pain prevalence may also be attributed to the locations in which the surveys were conducted; some surveys where performed in rural areas, whereas others were performed in urban areas. In a very recent COPCORD survey conducted in a west African community, the prevalence rate of MSK complaints was as high as 62.1% and associated with female gender, low educational level, smoking, alcohol use, high-intensity physical activity level, and body mass index (≥ 25 kg/m^2).[18]

While our findings are comparable with regional and global figures, some limitations in our study must be considered. The sample size of this cross-sectional study is too small to enable the analysis of rare diseases, such as autoimmune inflammatory arthritis and connective tissue disease. Moreover, our procedures deviated somewhat from the typical COPCORD methodology. First, the scheduling of appointments among positive respondents of the survey was delayed; participants should be interviewed within 7 days after completing the survey. Second, the response rate to the scheduled appointments was low. Finally, obtaining the participants' diagnosis from their electronic medical records is not included in the COPCORD methodology.

The direct and indirect costs of MSK conditions constitute a major financial burden for individuals and healthcare systems. This burden was recognized by the United Nations and WHO via the establishment of 2000 – 2010 as the Bone and Joint Decade. Lower back pain is one of the most common causes of work absenteeism. Degenerative joint diseases of the knees, hips, and spine can cause devastating chronic pain. Such diseases may sometimes progress to severe disabilities requiring surgical intervention. The burden of degenerative MSK disorders may be expected to increase in succeeding years on account of improvements in life expectancy, the increased prevalence of obesity, loss of physical fitness, and sedentary lifestyles.[5] The results of our study may be used as a guide for better strategic planning in the utilization of healthcare resources.

CONCLUSION

This small cross-sectional cohort study revealed that the overall prevalence rate of MSK disorders in Qatar (15.8%) is comparable with the rates reported in

Table 4. Comparison of the prevalence rates of total MSK and selected diseases in Qatar, Lebanon, Brazil, Australia, and Malaysia

	Lebanon	Brazil	Australia	Malaysia	Qatar
Sample size	3530	3038	1046	2594	1239
Total MSK prevalence rate	15%	7.2%	19.5%	5.6%	15.8%
Knee osteoarthritis	3%	37.3%	18%	2.9%	6.4%
Lumbar spondylosis	—	53.1%	—	—	4%
Rheumatoid arthritis	1%	0.46%	0	0.15%	0.16%
Connective tissue disease	0.2%	0.09%	0	0	0.08%
Fibromyalgia	1%	2.5%	—	0.9%	0.16%

— Not measured

other countries. Knee pain (24.5%) and knee osteoarthritis (6.4%) were the most common MSK complaints and diagnoses in the Qatari population. This study can guide future efforts to prevent and manage MSK diseases. Further studies with larger sample size are needed to support the findings.

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Appendix

إسم المشترك _____ عمر المشترك _____

عنوان المشترك بالكامل:

المبنى/ رقم المنزل :_____ رقم

الهاتف:_____

الشارع:_____ التاريخ:_____

الحي:_____

المدينة\القرية:_____

البلدية: _____

- يُملأ هذا الجدول لكل شخص تُجرى معه المقابلة:

ID	الرقم الصحي	HC
Municipality	البلدية	
City	المدينة	_____
interviewer	اسم المحقق	_____
DATE	تاريخ المقابلة	

- عند المقابلة، اذا كان في البيت أكثر من فرد يُسأ ل عن الاشخاص الموجودين في البيت، ثم يعبأ هذا الجدول ويتم اختيار عشوائيا مقابلة شخص من البيت.
- اذا كان في المنزل شخص واحد فقط فيتم مقابلة ذلك الشخص فقط من دون ملاء هذا الجدول.

	الاسم	العمر	الجنس
1			
2			
3			
4			
5			

استمارة
WHO-ILAR-COPCORD Core

القسم (A): معلومات ديموغرافية

A-1	تاريخ الميلاد؟	يوم ___ شهر ___ سنة ____	
A-2	كم كان عمرك في آخر عيد ميلاد لك؟	العمر: ----------	
A-3	الجنس؟	1 2	ذكر أنثى
A-4	الوضع الاجتماعي؟	1 2 3 4 5	أعزب متزوج أرمل منفصل أو مطلق خاطب

القسم (B): التاريخ المهني

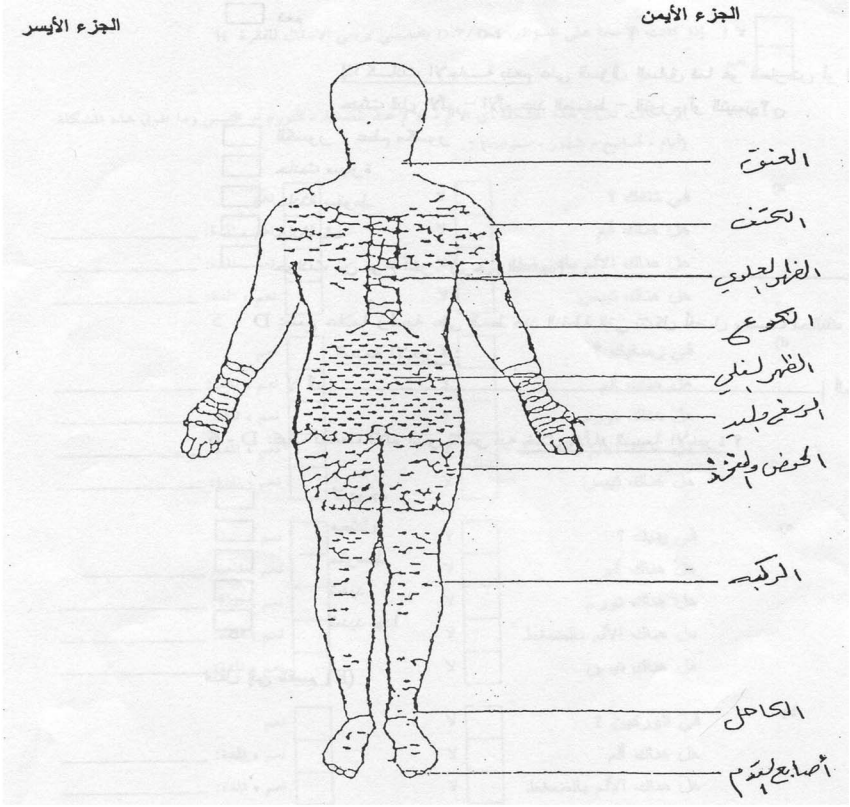
B-1	ما هو وضعك المهني حاليا؟	1 2	لا أعمل حاليا----------**الرجاء الانتقال الى B-3** نعم أعمل حاليا---------- **الرجاء الانتقال الى B- 2**
B-2	اذا كنت تعمل حاليا، حدد وظيفتك الحالية.		الوظيفة الحالية:---------- ----------
B-3	اذا كنت لا تعمل حاليا؛ ما هو السبب الرئيسي؟	1 2 3 4 5 6 7 8	رب\ربة منزل طالب(ة) طالب يعمل متقاعد عمل غير مدفوع\تطوعي مشاكل صحية ظروف عمل أسباب أخرى،حدد:----------
B-4	لأي مرحلة تعليمية وصلت\ في أي مرحلة أنت حاليا؟	1 2 3 4 5 6	أمي أقرأ وأكتب ابتدائي متوسط ثانوي جامعي أو مؤهلات عليا

القسم (C): الألم- الالم عند الضغط-التورم أو التيبس

C-1	هل عانيت في **الأيام السبعة الأخيرة** من أي مشكلة مثل الألم-الألم عند الضغط-التورم أو التيبس في عظامك أومفاصلك أو عضلاتك؟	1 2	لا---------- **الرجاء الانتقال الى سؤال(C-4)** نعم
C-2	أين كانت مشكلتك في الألم- الألم عند الضغط-التورم أو التيبس في **الأيام السبعة الأخيرة؟****** ومنذ متى تعاني من هذه المشكلة، حدد بالايام-بالاسابيع - بالشهور-بالسنوات)؟		
C-2-a	***في كتفك؟**	1 2	لا---------- **الرجاء الانتقال الى سؤال(C-2-b)** نعم

C-2-b	***في رسغيك؟**	1 2	لا---------- **الرجاء الانتقال الى سؤال(C-2-c)** نعم
C-2-c	***في يديك؟**	1 2	لا---------- **الرجاء الانتقال الى سؤال(C-2-d)** نعم
C-2-d	***في الوركين؟**	1 2	لا---------- **الرجاء الانتقال الى سؤال(C-2-e)** نعم
C-2-e	***في ركبتيك؟**	1	لا---------- **الرجاء الانتقال الى سؤال(C-2-f)**
C-2-f	***في كاحليك؟**	1 2	لا---------- **الرجاء الانتقال الى سؤال(C-2-g)** نعم
C-2-g	***في أصابع قدميك؟**	1 2	لا---------- **الرجاء الانتقال الى سؤال(C-2-h)** نعم
C-2-h	***في رقبتك؟**	1 2	لا---------- **الرجاء الانتقال الى سؤال(C-2-i)** نعم
C-2-i	***في عمودك الفقري؟**	1 2	لا---------- **الرجاء الانتقال الى سؤال(C-2-j)** نعم
C-2-j	***في أماكن أخرى (المفاصل،العضلات،العظام)**	1 2	لا نعم، **حدد المكان:**----------

C-3	هل حصلت معك أي حادث\ عارض قبل الالم-الالم عند الضغط-التورم أو التيبس؟	1 2	لا---------- **الرجاء الانتقال الى سؤال(C-6)** نعم
C-4	اذا كانت الاجابة بنعم على السؤال السابق فما هو العارض\الحادث الذي حدث قبل الالم- الالم عند الضغط-التورم أو التيبس؟	1 2 3 4 5	الكسور،عظم مكسور حادث سيارة حادثة سقوط حادثة ناتجة عن دفعك أو شدك لشيء ثقيل حوادث أخرى،حدد:----------
C-5	ضع علامة عامودية\رأسية على الخط عند النقطة التي تشكل أفضل وصف لحالتك خلال **الأيام السبعة الأخيرة**، حدد أكثر.		لا ألم | | | الم شديد جدا 1 5 10
C-6	كيف تصف الالم الذي تشعر فيه خلال الايام السبعة الاخيرة؟	1 2 3 4 5	لا يوجد خفيف متوسط شديد شديد جدا



القسم (D):العجز الوظيفي

D-1	هل أنت الان (أو كنت في أي وقت مضى) تشعر بصعوبة في القيام ببعض نشاطاتك اليومية بسبب مشكلة الالم- الالم عند الضغط- التورم أو التيبس في عظامك أو مفاصلك أو عضلاتك؟	1 2 3	لا صعوبة----------**الرجاء الانتقال الى القسم(F)** ليس حاليا ولكن كنت أشعر بصعوبة في الماضي أشعر بصعوبة حاليا
D-2	حدد مدة شعورك بالصعوبة.		المدة: يوم |___| ،أسبوع|___|، شهر|___|، سنة|_____|

القسم (E):صعوبة ممارسة مهام معينة

(هذا القسم هو فقط للذين أجابوا بأنهم يشعرون بصعوبة حاليا)

في هذا القسم نود معرفة المزيد عن مدى صعوبة قيامك بمهام معينة تصل بأنشطة الحياة اليومية بسبب مشكلة الالم- الالم عند الضغط-التورم أو التيبس في عظامك أو مفاصلك أو عضلاتك. هل هذه المشكلة (الالم- الالم عند الضغط- التورم أو التيبس) أثرت على قدرتك خلال الايام السبعة الماضية على النواحي التالية:

E-1	ارتداء الملابس بنفسك،بما في ذلك القيام بربط رباط الحذاء وتثبيت الازرار؟	1 2 3 4	بدون أي صعوبة مع بعض الصعوبة مع كثير الصعوبة لا أستطيع عمل ذلك على الاطلاق
E-2	الصعود الى الفراش والنزول منه؟	1 2 3 4	بدون أي صعوبة مع بعض الصعوبة مع كثير الصعوبة لا أستطيع عمل ذلك على الاطلاق
E-3	رفع كوب او فنجان ممتلىء الى فمك؟	1 2 3 4	بدون أي صعوبة مع بعض الصعوبة مع كثير الصعوبة لا أستطيع عمل ذلك على الاطلاق
E-4	المشي خارج المنزل على الارض المستوية؟	1 2 3 4	بدون أي صعوبة مع بعض الصعوبة مع كثير الصعوبة لا أستطيع عمل ذلك على الاطلاق
E-5	غسل وتجفيف جسمك بالكامل؟	1 2 3 4	بدون أي صعوبة مع بعض الصعوبة مع كثير الصعوبة لا أستطيع عمل ذلك على الاطلاق
E-6	الانحناء للأسفل لالتقاط الملابس من الارض؟	1 2 3 4	بدون أي صعوبة مع بعض الصعوبة مع كثير الصعوبة لا أستطيع عمل ذلك على الاطلاق
E-7	فتح صنبور(حنفية) المياه العادي واغلاقه؟	1 2 3 4	بدون أي صعوبة مع بعض الصعوبة مع كثير الصعوبة لا أستطيع عمل ذلك على الاطلاق
E-8	رفع دلو من الماء؟	1 2 3 4	بدون أي صعوبة مع بعض الصعوبة مع كثير الصعوبة لا أستطيع عمل ذلك على الاطلاق
E-9	الدخول والخروج من السيارة؟	1 2 3 4	بدون أي صعوبة مع بعض الصعوبة مع كثير الصعوبة لا أستطيع عمل ذلك على الاطلاق
E-10	الجلوس على شكل القرفصاء؟	1 2 3 4	بدون أي صعوبة مع بعض الصعوبة مع كثير الصعوبة لا أستطيع عمل ذلك على الاطلاق

القسم (F):العلاج

F-1	هل تناولت علاجا للالم- الالم عند الضغط-التورم أو التيبس في عظامك أو مفاصلك أو عضلاتك؟	1 2	لا--------**الرجاء الانتقال الى القسم(F-4)** نعم
F-2	من قام بوصف العلاج لك(ضع أكثر من علامة اذا لزم)	 1 2 3 4 5 6 7 8	 الطبيب، حدد الاختصاص:---------- ---- الصيدلي اختصاصي العلاج الفيزيائي خبير المعالجة باليدين المعالج بالوخز بالابر المعالج بالاعشاب علاج ذاتي(مرهم) علاجات أخرى، حدد:----------
F-3	نظام غذائي خاص	1 2	لا---------- نعم
F-4	هل أعطاك الطبيب اسما أو تشخيصا للالم- الالم عند الضغط-التورم أو التيبس في عظامك أو مفاصلك أو عضلاتك؟	1 2 3 4 5 6 7 8 9 10 11 12	التهاب المفاصل التهاب المفاصل الرثائي(مرض الروماتويد) نشاف المفاصل الروماتيزم نقرص الالم العضلي، التهاب ليفي الذئبة الحمراء(Lupus) التهاب الفقار القسطي المرض العضلي الهيكلي لالتنكاسي أمراض أخرى، حدد:---------- ----- تعب جسدي لم يذهب\تذهب الى الطبيب

القسم (G):الطول والوزن

	Measure_1	Measure_2
الطول(cm)		
الوزن(Kg)		