

Supplementary Table 1. Characteristics of included studies divided into categories according to definition (physician-diagnosed, self-report and chronic widespread pain by questionnaire only) and birth cohort studies.

First author & year	Study design	Base population	Control group	Diagnosis of Fibromyalgia	Duration Follow-up & No. of new cases	Incidence per 1000	Risk factors -Univariate	Risk factors Multivariate Adjusted Hazard ratio (95% CI)	Quality
Physician diagnosis of Fibromyalgia recorded on database									
Forseth 1997 * (1)	Prospective cohort study Females aged 20±49 yr	Random sample of 820 females aged 20±49 yr free of FM and followed up after 5.5 years n=717 (82% response)	100 FM-free controls	ACR criteria including tender point count by clinical examination	5.5 years 21 cases CWP 12 had FM by ACR criteria Allowing for drop-outs, 23/717 (3.2%)	FM =5.83/1000 person-years CWP =1% per annum or 10 per 1,000 person - years	n/a	n/a	n/a
Weir 2006(2)	Retrospective cohort study	Deseret Mutual Benefits Administration database 62,000 working people <65 years old	105,021 FM-free controls	ICD-9-CM code 729.1	5 years N= 2595 incident cases	Males: 6.88 per 1000 person-years Females: 11.28 cases per 1000 person-years (9.01 for both sexes combine).	*Females *older age – peak at 50-60 years Associated diagnoses: depression, anxiety, headache, IBS, CFS, RA, SLE, diabetes. (not clear if these preceded FM)		n/a
Chang 2015	Retrospective	NHIRD	68,568	ICD-9-CM code	3 years	Depressed cohort:	*female	*Depression	high

(3)	ve cohort study	1 million, 17,142 patients with depression	Depression-free matched controls	729.1	N=1800 Depressed cohort: FMS 6.5% V 1.0% non-depressed aHR =6.28, (95% CI 5.67–6.96)	21.6 per 1000 person-years Non-depressed cohort: 3.3 per 1000 person-years	*Depression *Migraine *low back pain *allergic rhinitis Patients with depression developed FM at earlier age than those without.	6.28(5.67–6.96) *Migraine 1.63 (1.04–2.56) *low back pain 2.63 (2.18–3.18) *allergic rhinitis 1.44 (1.23–1.68) Bidirectional : Patients with FMS had increased risk of developing depression	
Wang 2017 (4)	Retrospective case cohort study	NHIRD 1 million population: GERD cases n= 34,630	138,520 matched non-GERD controls	ICD-9-CM 729.1	3 ½ years FM onset cases n= 2584	GERD cohort: 5.76 per 1000 person-years vs control cohort: 3.96 per 1000 person-years aHR of 1.44 (95% CI 1.29-1.60)	*GERD *age *NSAIDs *Diabetes *Hypertension *Hyperlipidemia *Anxiety *Sleep disorder *Stroke *Peptic ulcer disease Protective: *PPI No difference by sex.	*GERD 1.31 (1.19-1.45) *Older Age 1.02 (1.01-1.02) *Peptic Ulcer 1.12 (1.02-1.23) *NSAID 1.17 (1.07-1.27) Bidirectional : Patients with FM had greater risk of developing GERD	high
Chen 2017 (5)	Retrospective case cohort study	NHIRD 1 million population: Osteomyelitis patients: n= 1174	4976 matched Osteomyelitis-free controls	ICD-9-CM code 729.1 on at least 3 occasions	12 years N= 768	Osteomyelitis cohort: 25.4 per 1000 person-years V Comparison cohort: 18.8 per	*female *osteomyelitis *older age *hypertension, *IBS, *sleep disorder	*female 1.26 (1.09–1.46) *osteomyelitis 1.26 (1.06–1.49) *older age 1.48 (1.18–1.85)	high

		(mostly older men) **				1,000 person-years	* diabetes *anxiety *Depression *hyperlipidaemia	*hypertension 1.29 (1.07–1.55) * IBS 1.41 (1.01–1.97) *sleep disorder 1.48 (1.21–1.81) Exposure-response effect for severity of osteomyelitis	
Marrie 2012 * (6)	Retrospective case cohort study	Manitoba Health and medical records data N= 4192 with Multiple Sclerosis (72% women)	20,940 Non-MS matched controls	ICD-9-729.1 ICD-10 M79.7 at 5 hospital visits	5 years minimum N= 359 Prevalence of FM was 2.4% by medical records and 3.5% a/c to self-report	1.2 per 1,000 person years v 0.9 per person-years in the general population. IRR=1.44 (95%CI:1.01–2.07)	*female *increasing age *MS Mean age of onset FM was 53.1 in MS patients and 52.6 in general population	*multiple sclerosis 1.44 (1.01-2.07)	high
Chen 2018 (7)	Retrospective case cohort study	NHIRD 1 million: Incident cases of FM over 3 years n=61,613	18,040 -matched patients without IBD	ICD-9-CM code 729.1	12 years N= 1,106 of IBD group who developed FM N=2,606 in the non-IBD group,	IBD group: 32.7 per 1,000 person-years, Control cohort: 18.2 per 1,000 person-years	*older age – 40-59 group No sex difference in IBD group but in non-IBD cohort higher incidence in women compared to men Ulcerative colitis and Crohn's disease act as	*IBD 1.70 (1.59–1.83) *Medical Comorbidity In non- IBD cohort only: *Older age *Female IBD had relatively	high

							an independent risk factors	larger influence in the younger age groups who had fewer comorbidities	
I-Wen Penn 2019 (8)	Retrospective cohort study	LHID 17,420 migraine patients with no previous FM	69,680 controls	ICD-9-CM code 729.1)	12 years N=2,834	Migraine cohort: 7.01 per 1000 Person Years Non-migraine cohort: 4.49 per 1000 Person Years	*Migraine *Older age *Diabetes *Hypertension *Hyperlipidaemia *Depression *Anxiety *Sleep disorder *Coronary Heart Disease *Irritable Bowel Syndrome (Sex and chronic fatigue syndrome not associated)	*Migraine 1.51 (1.38 to 1.65) *Older age 1.02 (1.01 to 1.02) *Hyperlipidaemia 1.15 (1.03 to 1.28) Bidirectional but FM had stronger predictive power for the onset of migraine than did migraine for the onset of FM.	high
Kivimaki 2004 (9)	Prospective cohort study	4791 (540 male, 4251 female) Hospital employees (59% response)		Physician-diagnoses FM	2 years 47/4791	4.9 per 1000 person years		*High workload, 2.5 (1.1–5.6), *low decision latitude, 2.6 (1.2–5.9), *workplace bullying 3.9 (1.3–11.8),	fair
Gallagher et al 2004 (10)	Retrospective case cohort study	UK GPRD 2.4 million	n/a	Clinical diagnosis by GP using READ code.	11 years	0.4 per 1000 in 2000/2001	*female sex. *age 40- 55yrs		n/a
Collin et al	Electronic	All patients	n/a	GP recorded	13 years	Annual incidence	*Females had six-fold		n/a

2017 (11)	health records cohort study. GPRD	with 1 st FM diagnosis over 13 year period from 660 practices.		diagnosis using READ code.	N=20,984 .	rate for FM diagnosis was 0.33 per 1000	higher incidence of FM than men *Peak age = 40 and 49 years *lower SES		
Self-reported diagnosis of Fibromyalgia									
Mork 2012 * (12)	Prospective cohort study	HUNT1 - 12,350 women pain- free at baseline. (68% followed up)		Self report – physician diagnosed FM	11 years 327 new onset	incident FM, (2.4 per 1000 person-years).	*Sleep problems in exposure-response manner. No diff re age.	*sleep problems 3.43 (2.26–5.19)	fair
Mork 2010 * (13)	Prospective cohort study	HUNT1 - 15,990 women pain- free at baseline.		Self report – physician diagnosed FM	11 years 380 new onset CWP	380 incident FM, (2.2 per 1000 person-years)	*little exercise . *Raised BMI	*raised BMI 1.70 (1.35–2.13)	fair
Choi 2010 (14)	Prospective cohort study	Adventist Health study (women) 3156 included in both and second survey 25 years apart	Non-FM women in study	Self report “Have you been diagnosed with fibromyalgia by a physician” Excluded those with FM before first survey	20 years N=136	1.72/1,000 per year	*smoking *>1 prior surgery *symptom control medication ^a *no of allergies (dose response) * prior peptic ulcer *prior hyperemesis gravidarum. ^a analgesia, anti-indigestion medication, tranquilizers, hypnotics	*smoking 2.37 (1.33-4.23) *1 allergy 1.61 (0.92–2.83) *2+ allergies 3.99 (2.31-6.88) Not associated: age, BMI, education, employment & marital status, hypertension, breast cysts/lumps or RA	high
Chronic widespread pain identified by questionnaire only									

Hagen 2012 (15)	Prospective cohort study	HUNT study: 1995/97 and 2006/08: 41,766 eligible in both. Of these, 26,197 surveyed (63% response) 13,781 were CWP-free		CWP by ACR questionnaire	11 years N=2494	16.4 per 1000 person-years	*any headache *migraine * non-migrainous headache Exposure-response effect for frequency of headaches Bidirectional	After adjustment for age, gender, BMI education, physical activity, smoking, anxiety/ depression: *any headache >14x /month 2.7 (1.6–4.7) *migraine 2.0 (1.6–2.4)	fair
Mundal 2014 (16)	Prospective cohort study	Nord-Trøndelag Health Study 19,192 free of CWP (82% response)	No CWP at follow-up	CWP by questionnaire - ARC-ACR criteria	11 years, 12% developed CWP: 8% (n = 915) of those pain-free at baseline & 20% (n = 1412) of those with some pain at baseline .	10.9 per 1000 person years 7.2 per 100 person years for pain-free but 18.2 per 1000 py For those with some pain at baseline	*female *current pain *Anxiety *depression, *smoking *sleep problems *BMI =underweight *BMI=overweight/ obese Moderate alcohol use was protective	*female *Anxiety/depression 1.73(1.42-2.09) *smoking 1.45(1.30-1.62) *alcohol regularly 0.79(0.64-0.97) *sleep problems 1.49(1.33-1.67) *low BMI 2.05 (1.24-3.39) *raised BMI 1.35 (1.18-1.55)	high
Uhlig 2018 & Sivertsen 2014 (17, 18)	Prospective cohort study	2 nd and 3 rd HUNT studies Full data on 13,113 (23% of original sample)	13,113 no insomnia	CWP by ACR criteria by questionnaire Compared to clinical interview -	11 years -mean N=1400 developed CWP 19.6% of insomnia	Total population: 9.4 per 1000 person years 17.8 per 1000 person-years for insomnia cohort	*insomnia *fewest and highest yrs of education significant interaction for education level (P interaction =	*Insomnia 1.93,(1.40–2.66) Insomnia was risk factor for 11 out of 18 conditions but only 3 had adjusted	fair

		316 had insomnia		adjusted agreement (kappa value) for CWP = 0.48 (95% CI 0.38–0.64).	cohort v 10.2% of control cohort	V 9.3 per 1000 person-years for control cohort Adj HR = 1.58 (1.26–1.98)	0.03. : In fully adjusted analyses separated by education level, RRs for CMSC were : ≤9 years 1.31 (1.0–1.65) 10-12yrs 0.96 (0.8–1.2) ≥13 yrs.1.25 (1.0–1.56)	OR >2: anxiety, depression and FM : 2.05, (1.51–2.79)	
McCabe 2016 (19)	Prospective cohort study **	European Male Ageing study 2118 men CWP-free at baseline followed up mean age = 59 years		ACR by questionnaire	4.3 years 151 (7.1%) new CWP	16.5 per 1000 person years	*High BMI *Depressed *2 comorbidities *longer sit to stand time *slow to walk 50 yards *no alcohol No association with vitamin D deficiency		fair
McBeth 2001 (20)	Prospective cohort study	Random sample of population 1658 FM-free at baseline (75% response rate at baseline). 1480 (93% response) 1 year later (50% of original sample).	CWP-free at follow-up	ACR criteria by questionnaire	1 year N=81	81 (5.8%) had developed CWP 58 per 1000 person-years 8% of those with some pain at baseline 2% of pain-free cohort at baseline	* female *older age *anxiety/depression *Illness Behaviour + *Somatic symptoms * pre-existing pain + includes frequent visits to GP	*Illness behaviour 9.0 (3.7–22.2) *Somatic symptoms 3.3 (1.5–7.4)	Fair

McBeth 2003 (21) (same sample as McBeth 2001)	Prospective cohort study	Random sample of population 1403 FM-free at baseline and followed up at 1 year. (91% response)	1322 CWP-free at follow-up	ACR criteria but without TP examination	1 year N=81 had CWP	6% had developed CWP	<ul style="list-style-type: none"> *heavy manual work *kneeling *repetitive wrist work *Illness Behaviour ⁺ *Somatic symptoms *Fatigue <p>⁺ includes frequent visits to GP</p>	<ul style="list-style-type: none"> *Illness behaviour 2.1(1.2-3.9) *repetitive wrist Work 1.8(1.2-2.7) *any pain at baseline 2.1(1.3-3.3) 	fair
McBeth 2007 Substudy of Mcbeth 2001 (22)	Prospective cohort study	Altrincham pain study - 267 at high risk of CWP - agreed to HPA measurement 58%response - 241 followed up		28 (11%) had new onset CWP	1 year	n/a	<ul style="list-style-type: none"> * depression *poor sleep, *threatening life events <p>High cortisol:</p> <ul style="list-style-type: none"> *post dexamethasone *evening saliva *low morning cortisol <p>Independent and additive predictors of CWP</p>	<p>After adjustment for age, sex, depression, disturbed sleep, traumatic life events and pain status:</p> <ul style="list-style-type: none"> *High level of cortisol post dexamethasone *Low cortisol in morning saliva *high cortisol evening saliva 	fair
Gupta 2007 (23)	Prospective cohort study	3171 adults aged 25–65 yrs free of CWP were followed-up 15 months (82% response) but 75% of whole cohort	CWP-free at follow-up	CWP by ACR criteria by questionnaire	15 months N=324 (10.2%)	10.2% developed CWP at follow-up = 81.6 per 1000 person years	<ul style="list-style-type: none"> *pain (not chronic) at baseline *somatic symptoms *illness behaviour *health anxiety *anxiety *depression *sleep disturbance *stressful life events 	<ul style="list-style-type: none"> * non-chronic pain at baseline 6.1 (4.3, 8.6) *Somatic symptoms 1.8 (1.1, 3.1) *Illness behaviour 3.3 (2.3, 4.8) *sleep disturbance 2.2 (1.6, 3.2) 	Fair

							No difference by age and sex. No effect of SES.	All showed an exposure-response relationship and their effect on risk was additive	
Gupta 2007 (24) Subset of above study	Prospective cohort study	768 CWP- free Of which 463 were invited and 267 (58%) agreed, of whom 254 (54%) provided full data. 231 followed-up 15 months	CWP-free at follow-up	CWP by ACR criteria by questionnaire - Selected "high risk" group	15 months 231 subjects at baseline free of CWP, 26/231 had new CWP (11.3%)	11.3% developed CWP at follow-up (high risk group)	Pain threshold at baseline did <u>not</u> predict CWP onset Tender point count did <u>not</u> predict new CWP	An increased sensitivity to pressure pain in subjects with chronic widespread pain is therefore likely to be a secondary phenomenon rather than the antecedent of pain.	fair
McBeth 2014 (25)	Prospective cohort study	North Staffordshire Osteoarthritis Project Data on 4326 at baseline (>50 years) and 3-yr follow up (46% response) 800 were CWP- free at baseline	WP-free at follow-up	WP by ACR criteria by questionnaire	3 years N=800/4326 3526 No pain at baseline: 7.7% (121/1562) developed WP Regional pain at baseline: 24.6% (679/2764) developed WP	For whole cohort: 61 per 1000 person years: For pain free: 26 per 1000 person-years For cohort with regional pain: 82 per 1000 person-years	*female *few years education *high/low BMI *moderate/low SES *low social participation *no alcohol *financial strain, *obese *anxiety or depression, *lower physical and mental HRQOL *osteoarthritis *comorbidities *cognitive impairment *sleep problems	*older age 0.97 (0.96-0.99) *baseline pain 1.2 (1.1-1.3) *anxiety 1.4 (1.0-2.1) *physical impairment 1.2 (1.0-1.5) *cognitive complaint 1.3 (1.0-1.6) *nonrestorative sleep 1.9 (1.2-2.8) *diffuse OA 1.7 (1.3-2.1)	fair

Papageorgiou 2002 (26)	Prospective cohort study	2334 in original survey: 1329 CWP-free at baseline followed up 7 years later		CWP a/c ACR definition (questionnaire only)	7 years 75/1156 developed CWP 13/562 2.3% of pain-free and 62/594=10.4% of "some pain"	6.4% developed CWP over 7 years = 9.1 per 1000 person years Of pain-free = 3.3 per 1000 person years Of "some pain" cohort = 14.8 per 1000 person years	* Some pain at baseline 2% and 10% of subjects with no pain and "other pain" at baseline had developed CWP after seven years, respectively. No sex difference	female: *Fatigue 4.8 (2.2 to 10.8) *Dry eyes 3.5 (1.5 to 7.9) Age >50 yrs 3.0 (1.4 to 6.1)	fair
Andersen 2017 (27)	Prospective cohort study	Tromso Longitudinal study N= 4,496 pain free at baseline and followed-up (66% response)	No CWP at follow-up	Severe musculo-skeletal pain in 3 regions for more than 3 months	13 years N=441	7.5 per 1000 per year	*female gender, *current smoking, *poor self-perceived health, *low educational level, *high BMI *Physically inactive (not in multivariate analysis) *Mental health complaints	*female gender 1.46 (1.29-1.66) *current smoking 1.33 (1.16-1.52) *poor self-perceived health 1.62 (1.30-2.02) *few yrs education 1.73 (1.46-2.05) *high BMI 1.39 (1.10-1.77) Mental health complaints (men only) 2.03 (1.18-3.50)	Fair
Bergman 2002 & 2004 (28, 29)	Prospective cohort study	1852 Participated in 1995 and 1998 (78% response 1150 pain-free	No CWP at follow-up	CWP by ACR criteria for postal survey	3 years N= 101 new onsets of CWP: 25/1150	7.2 per 1000 person-years for pain-free at baseline	*Initial chronic regional pain *Older age (>59 years) *lack of social support *Immigrant status	*older age 3.1 (1.47-6.7) * family history of chronic pain 1.9 (1.1-3.1)	fair

		at baseline 463 had chronic regional pain			(2.17%) of pain-free 76/463 (16.4%) of those with regional pain	54.6 per 1000 person-years for those with regional pain at baseline.	*current smoker *regular alcohol protective Not associated: sex, SES, educational level, housing area.	* >6 painful regions of pain 12.1 (4.5-33) Protective factors: *regular alcohol 0.42 (0.2-0.85) *personal social support 0.49 (0.28-0.85) Exposure response effect - number of painful sites.	
Aili 2018 (30)	Prospective cohort study	EPIPAIN Study Participants without sleep problem in 1995/8 Followed up after 5 years N=1249 (83%) and 18 yrs, n=791 (52% response) Age 20- 74years	Pain-free at follow-up	CWP by questionnaire - ACR criteria	5 & 18 years New CWP: 89 (7%) at 5 yr follow-up 103 (13%) at 18 years follow-up	Over 5 years Incidence= 14.2 per 1000 person-years Over 18 years: 7.2 per 1000 person-years	At both 5- and 18-years: *early awakening *non-restorative sleep *initiating sleep *maintaining sleep *fatigue *no of pain regions *poor mental health No difference by sex at 5 yr, but more female at 18years	At 5 yrs: * 4 sleep problems 2.18 (1.04–4.56) *6 pain sites 7.78 (3.13–19.26) *manual work 2.34 (1.23-4.44) *fatigue 2.68 (1.21 – 5.96) At 18 years f-up: *Female *all 4 sleep problems 2.29 (1.01–5.18) *no of pain sites 8.24 (2.88–23.63) Sleep and fatigue influenced CWP onset	fair

								independently	
Birth cohort studies									
Vandenkerkhof 2011 (31)	Prospective cohort study	1958 British Birth Cohort Study At age 45 years. N=was 8572 in present study	Participants free of CWP at follow up	ACR criteria by Questionnaire	n/a	Prevalence : 1056 (12%) had CWP at age 45 years	at 33 years: both sexes: *Raised BMI *unemployed *smoking *physical exertion at work *low SES * Other marital status *alcohol - protective women only: *fruit and veg rarely *frequent fatty foods	both sexes: *Raised BMI *unemployed *smoking *physical exertion at work Women: *fruit and veg rarely *alcohol protective Men: *marital status not single	
Jones 2007 (32)	Prospective cohort study	1958 British Birth Cohort Study N=10,453: 7,470 participated at age 45 years (71.5%).	Participants free of CWP at follow up	ACR criteria by Questionnaire	n/a	Prevalence : 915 (12.2%) had CWP aged 45 years No difference between men (11.8%) and women (12.7%)	*Multiple symptoms aged 7 years (vomiting, bilious attacks, periodic abdominal pain and frequent headaches or migraine)	*Multiple symptoms during childhood As proportion of children exposed was small, the population attributable risk associated with childhood symptom reporting was low.	
Jones 2009	Prospective	1958 British	Participants	ACR criteria by	n/a	Prevalence:	Childhood traumas:	Prior to 7 years of	

(33)	cohort study	Birth Cohort Study N= 9377 participants followed up at age 45 yrs, 7571 participated (71.5% response)	free of CWP at follow up	Questionnaire		12.3% had CWP at 45 yrs was and there was no difference between men (11.8%) and women (12.7%)	*hospitalisation as child after traffic accident *prolonged separation from mother/ in institutional care <7 yrs *Maternal death before age 7 yrs *family financial difficulties	age: *family financial difficulties *maternal death *periods in local authority care .	
Pang 2010 (34)	Prospective cohort study	Birth Cohort Study N= 14,936 participants followed up at age 45 yrs, 8572	Participants free of CWP at follow up	ACR criteria by Questionnaire	n/a	12.9% of females and 11.7% of males		After adjustment for gender, social class, childhood symptoms and adult : * persistent behaviour problems at 7, 11 and 16 years reported by teacher (RR 2.14; 95% CI 1.43, 3.21)	
Gale 2012 (35)	Prospective cohort study	1958 British Birth Cohort Study N= 6902 participants followed up at age 45 yrs, 7571 participated (71.5%	Participants free of CWP at follow up	ACR criteria by Questionnaire	N=993	Prevalence: 14.4% had CWP at 45 yrs was and there was no difference between the sexes (51.9% were women)	*lower IQ measured at age 11 years. As mentioned above (Macfarlane 2009) CWP associated with low SES, and at age 42 years, with no academic qualifications, smoking, higher BMI &	After adjustment for confounders : *lower IQ measured at 11 years Linear relationship between IQ age 11 years and risk of	

		response)					psychological distress.	CWP at 45 years	
Bendayan 2018 (36)	Prospective cohort study	1946 British birth cohort At age 68 years N= 2816, 2370 included (84.2% response)	Pain-free at follow-up	CWP by questionnaire - ACR criteria	N/A	Prevalence: 10.6% had CWP: 13.2% of women & 7.7% of men	*Smoking increased risk of CWP (but not other pain): Compared to lifelong non-smokers, RR= 2.64 for predominant smokers and 2.27 for lifelong smokers	After adjustment for age, sex, SES, anxiety, depression, health behaviours, chronic illness: *Predominant or lifelong Smoking	
Muthuri 2016 (37)	Prospective cohort study	1946 British birth cohort At age 68 years N= 2943, 2453 included (84% response)	Pain-free at follow-up	CWP by questionnaire - ACR criteria	N/A	Prevalence: 10.6% had CWP 13.2% of women & 7.7% of men	*serious physical illness when young <25yrs *low occupational class *lower educational attainment, *parental divorce	After adjustment for all variables: *Serious physical illness <25 years RR= 1.43 (95% CI: 1.05-1.95) exposure-response relationship: greater effect of 2 compared to 1/0 serious illness.	
Markkula 2016 (38)	Prospective cohort study	Finnish Twin Cohort born 1930-1957 without CWP in 1975/1981 followed up in 1990 N=8343 Mean age 28 years	CWP-free participants at follow-up	Unique definition a high frequency of FM symptoms resembling clinical FM patients	9 and 15 years In 1990 n=700 (8.4%) with FM-like symptoms	n/a	*older age * female *regional pains *poor sleep *overweight/obese *few years of education *frequent headaches *physically active = protective	*Headache *Regional pain (back and neck) *Sleeping problems *overweight	

							NB dose response across 3 categories		
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*= women only in the sample

**=predominantly or only men in the sample

NHIRD = National Health Insurance Research Database (Taiwan)

GPRD = UK General Practice Research Database

IRR = Incidence rate ratio

FM=Fibromyalgia

^a= tranquilizers, sleep medications, laxatives, pain killers or pep pills

^b= incidence is 4 times higher than prevalence in this study

LHID = Longitudinal Health Insurance Database (Taiwan), NHIRD=National Health Insurance Research Database (Taiwan)

IRR= incidence rate ratio

ICPC= International Classification of Primary Care (from Wonca International Classification Committee).

NCDS= Natonal Child Develoment Study

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