

Prevalence of Rheumatic Musculo-skeletal Disorders in Rural Manipur using WHO-ILAR COPCORD (Bhigwan) Model

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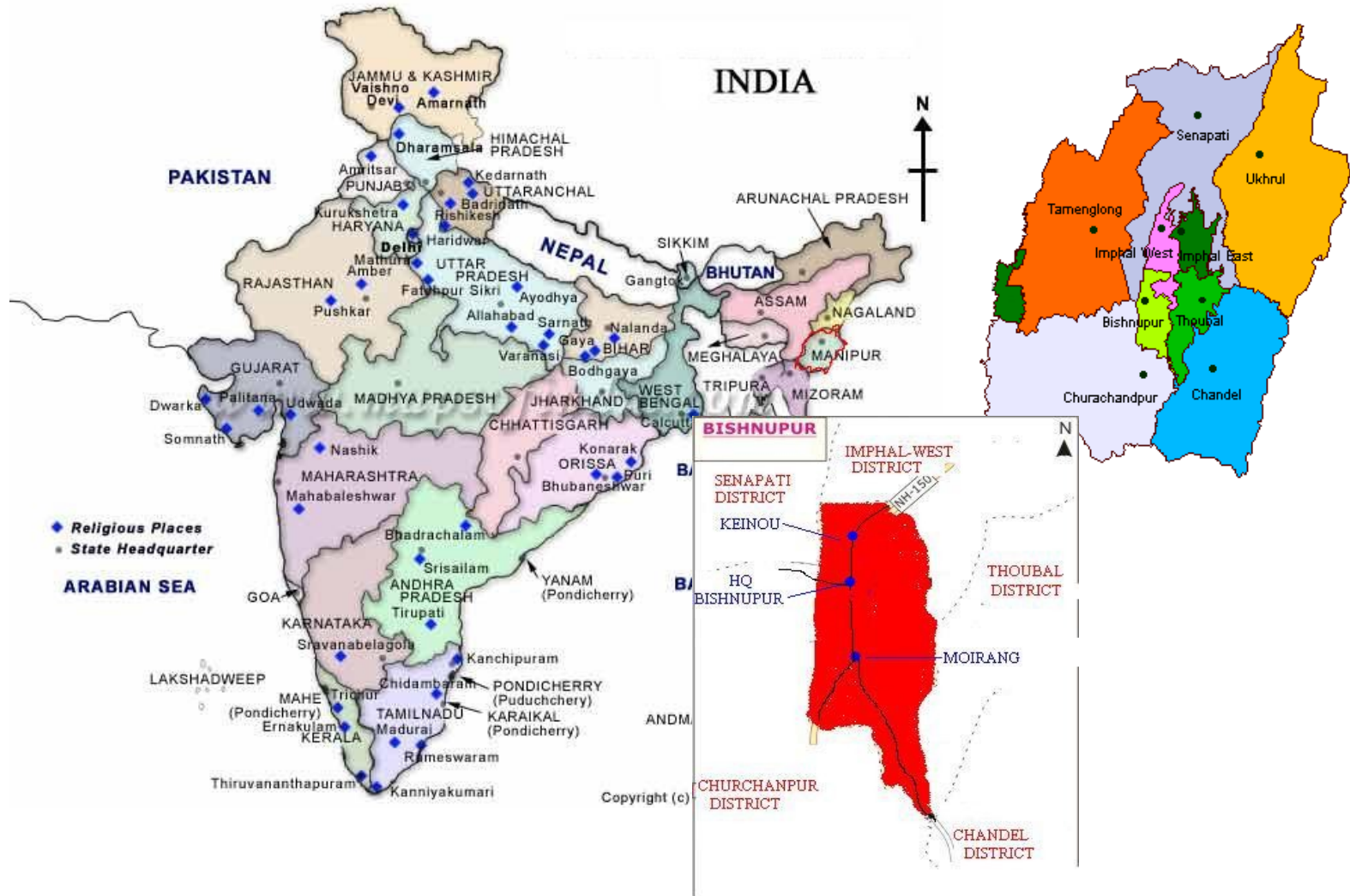
Phase I (Initiation) : 21st April 2008

Phase III (completion): 31st July 2008

Geographical location

- Keinou village, Bishnupur District in Manipur
- 790 m MSL, moderate winter, hot summer, moderate rainfall; NH 153, 30 Km.
- Cross-sectional study
- Non – randomized site selection
- Non-migrant population, Hindus & Christians, traditional joint family; agriculture, fishing, manual labour- works & with 10% Employment
- Total Population: 4509 (2001 Census)

Study site: Manipur (Keinou)



Methodology

- Bhigwan COPCORD Fast Track Model
- Pre-sensitization camps (3)
- Phase I & II : Simultaneously
- Phase III Health Camps: at Village (4 nos)
- Special Home visits: (3 nos)
- HW (Phase I & II): PTs (7) & Interns (6)
- Village Volunteers: 8-10 volunteers from each 3 hamlets of village + 1 local leader (SW)

Response rate

- Target population: 4509

Phase I: 4298 (95%)

Phase II: 739 (16.4%) (Female: 62%)

Phase III: 539 (74%) (Age

<15 : 4.8%)

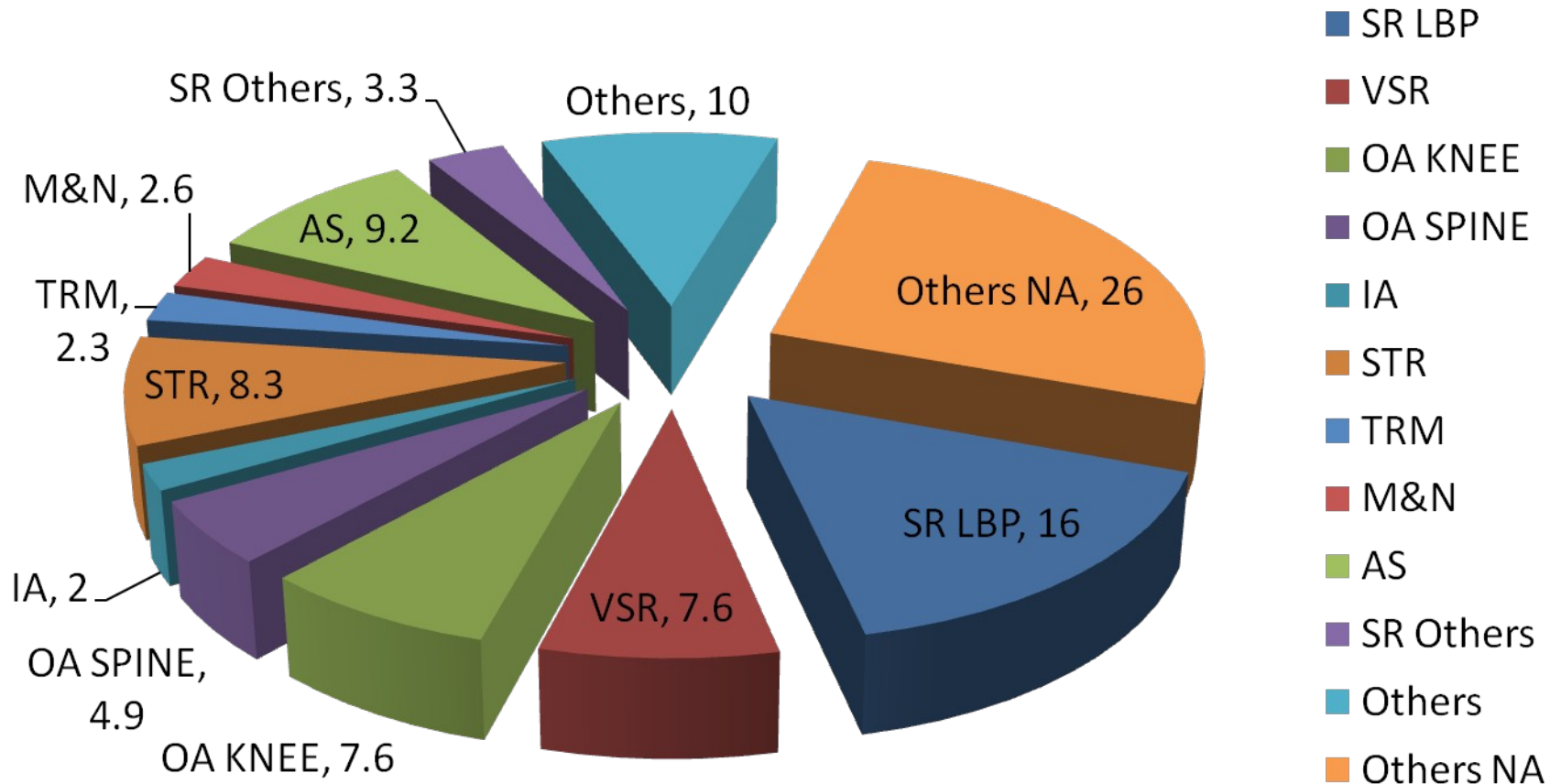
Frequency of pain sites (Phase I)

Category	No.of patients(%)	UCL - LCL	Category	No. of patients (%)	UCL - LCL
<u>Pain any site</u>	<u>739 (16.4)</u>	17.5-15.3	MSK Ankle	38 (0.8)	1.1-0.5
MSK LBP	450 (10)	10.8-9.1	MSK Hip	13 (0.3)	0.4-0.13
MSK Knee	141 (3.1)	3.6-2.6	MSK Buttock	14 (0.3)	0.4-0.14
MSK UBP	75 (1.7)	2.0-1.3	MSK Thigh	26 (0.6)	0.8-0.4
MSK Sholder	70 (1.6)	1.9-1.1	MSK Calf	26 (0.6)	0.8-0.4
MSK Neck	39 (0.9)	1.1-0.6	MSK Heel	8 (0.2)	0.3-0.05
MSK Elbow	26 (0.6)	0.8-0.4	MSK Feet	8 (0.2)	0.3-0.05
MSK Wrist	13 (0.3)	0.5-0.13	MSK Chest	19 (0.4)	0.6-0.23
MSK Hand	8 (0.2)	0.3-0.05	MSK X site	30 (0.7)	0.9-0.4

Self Reported Complaints

Category	Number (%)	UCL -LCL
MSK all Areas	1010	
MSK Trauma	11 (0.2)	0.4-0.01
ENT	21 (0.5)	0.7-0.3
Skin	14 (0.3)	0.5-0.2
BP	14 (0.3)	0.5-0.2
Abdominal	12 (0.3)	0.4-0.1
Neurological	10 (0.2)	0.3-0.05
Respiratory	5 (0.1)	0.2-0.01
Eye	4 (0.1)	0.17-0
Renal	3 (0.1)	0.14-0
Others	8 (0.2)	0.5-0.3

Major Classification Disorders Phase III



COPCORD Classifications Phase III

Disease	Number (%)	UCL-LCL	Disease	Number (%)	UCL-LCL
OA Knee	56 (7.6)	9.8-5.3	STR Tenosynvitis	7 (0.9)	1.6-0.2
OA Lumbar Spine	26 (3.5)	4.8-2.1	STR Pl. fascitis	5 (0.7)	1.3-0.9
OA Cervical Spine	10 (1.4)	2.1-0.5	STR Others	18 (2.4)	3.9-1.2
OA Others	6 (0.8)	1.4-0.2	Inflam. Arthritis	15 (2.0)	4.0-0.9
STR Fr Shoulder	24 (3.2)	4.5-1.9	CDD Gout	11 (1.5)	2.3-0.6
STR Fibromyalgia	2 (0.3)	0.6-0.1	CTD SLE	3 (0.4)	0.8-0.05
STR Tennis Elbow	6 (0.8)	1.4-0.2	CTD UC/Overlap	2 (0.3)	0.6-0

COPCORD Classifications Phase III(ii)

Disease	Number (%)	UCL-LCL	Disease	Number (%)	UCL-LCL
VSR PIVD	28 (3.8)	5.1-2.4	SR Low Back	118 (16)	18-13
VSR LCS	19 (2.6)	3.7-1.4	SR UB & Neck	16 (2.2)	3.7-0.9
VSR Radiculopathy	6 (0.8)	1.4-0.2	SR Others	9 (1.1)	2.2-0.2
VSR Others	3 (0.4)	0.8-0.05	VS	18 (2.5)	4.5-1.0
TRM	17 (2.3)	3.4-1.2	Others	21	
M&N Osteoporosis	19 (2.6)	3.9-1.3	Asymptomatic	68 (9.2)	11.2-7.1
IDRS HMS	6 (0.8)	1.4-0.2	Others NA	194 (26.3)	29.4-23
IDRS Xchondritis	6 (0.8)	1.4-0.2			

Prevalence of Common MSK disorders

Disease	Prevalence	Disease	Prevalence
Inflammatory Arthritis	0.33	Gout	0.24
RA	0.16	OA (OA Knee	2.2 1.2)
IA – U (P)	0.11	SR (SR LB	3.2 2.6)
SSA	0.07	VSR	1.2

Logistic hurdles

- Uniformity of Data entry & reproducibility
- Meeting of PIs at regular basis
- High Expectations from Community in terms of continuity of extension & FU service
- Manpower support for identified cases: Medical & Paramedics
- Medical facilities & support (Budget : insufficient)
- Stage II: Risk factor identification

Conclusion

- High prevalence of MSK complaints (**16.4 %**)
- LBP, Knee pain & Shoulder pain commonest MSK complaints ($10+3.1+1.6 = \mathbf{14.7\%}$)
- Inflammatory arthritis Incidence low: **2%**
- OA Knee & spine accounts for 7.6 & 5% (**12.6%**)
- SR low back & VSR account for 16 & 7.2% (**23%**)
- TRM cases :**2.6%** & IDRS HMS : **0.8%**

Thanks for your visit



Acknowledgement

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