

**PREVALENCE OF RHEUMATIC  
MUSCULO SKELETAL DISORDERS  
IN A RURAL POPULATION OF SOUTH  
INDIA, KERALA**

*using WHO -ILA-COPCORD Bhigwan Model*

*-a BJD India NAN initiative*

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## ***Geographical Location:***

Mavoor Panchayat,  
Kunnamangalam Block,  
Calicut district, Kerala

## ***Selection design:***

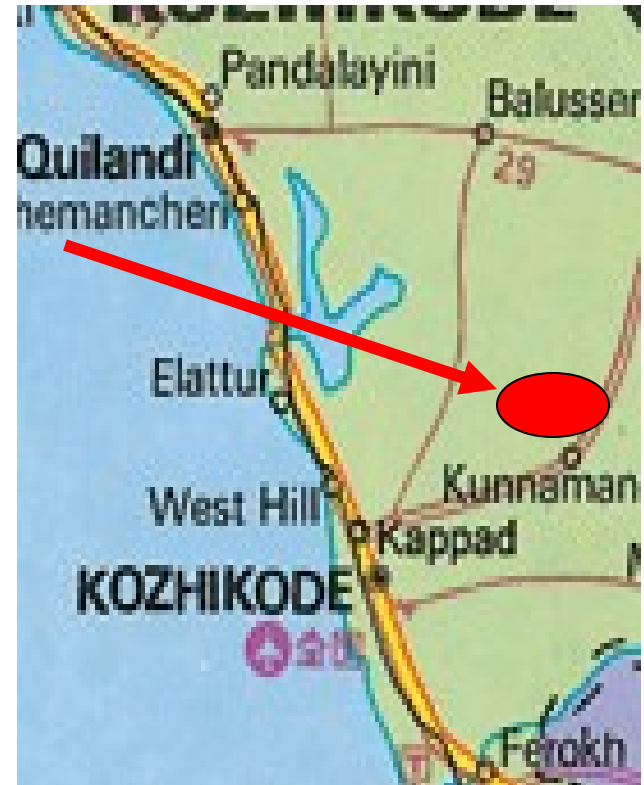
2 subcentres in Mavoor  
panchayat(rural setting)-Simple  
Random sampling

## ***Population size:***

5000 Population (1127 House  
holds)

## ***Sample:***

Population over 15 years in these  
households.



# Methodology

- Standard COPCORD Methods Followed.
- Only deviation being selection of study units by random sampling.
- Utilisation of **Accredited health workers** under the National rural health mission for data collection.

# RESPONSE RATE

## ***Target Population:***

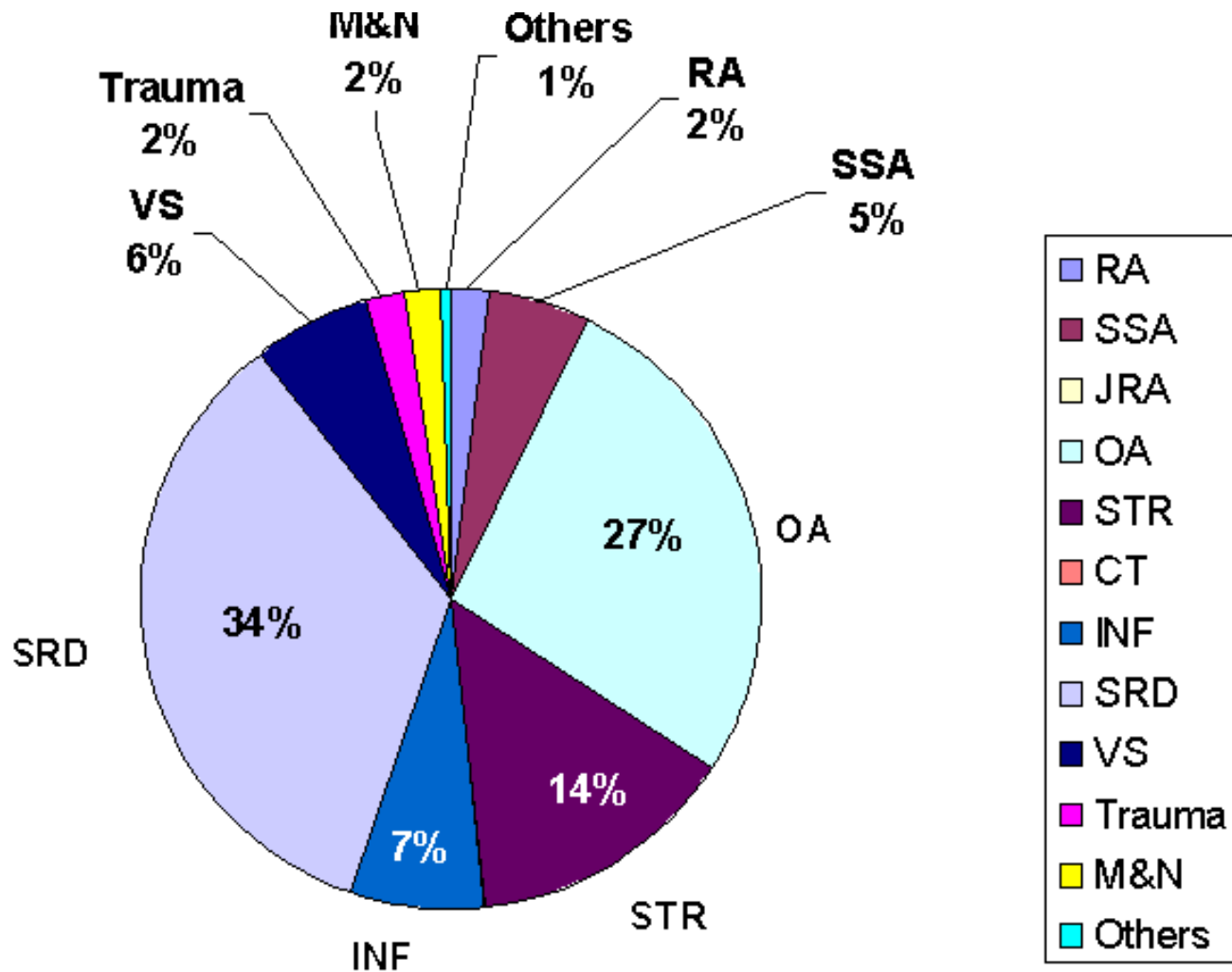
5000 population over 15 years of age.

- PHASE I – 5000
- PHASE II – 1476/5000 (29%)
- PHASE III–1322/1476(89.5%)

# FREQUENCY OF PAIN SITES

<b>Pain location</b>	<b>Bhigwan (India) N=4092</b>	<b>Indonesia N=4683</b>	<b>China N=4213</b>	<b>Australia N=1437</b>	<b>Kerala N=5000</b>
<b>Pain at any site</b>	17.9	24	-	-	<b>17.2</b>
<b>Neck</b>	6.5	5	4.6	17	<b>2.4</b>
<b>Back any site</b>	13. 1	15.7	-	-	<b>14</b>
<b>Calf pain</b>	6.5	-	-	-	<b>11.7</b>
<b>Shoulder</b>	7.4	11	4.6	10	<b>4</b>
<b>Elbow</b>					<b>4</b>
<b>Hand/wrist</b>	7.3	-	-	-	<b>3.2</b>
<b>Knee</b>	12.7	12.2	27	15	<b>16.2</b>
<b>Ankle/feet</b>	8	-	-	-	<b>10.2</b>
<b>Any joint</b>	15.8	18	33	32	<b>13</b>
<b>Soft tissues any site</b>	15.9	-	-	-	<b>14</b>

# Diagnostic breakup of diseases: ACR Criteria



# Phase III disease Breakup and Prevalence Estimates

<i>Diagnosis</i>	<i>Number</i>	<i>Prevalence</i>	<i>Confidence Interval</i>
RA	26	0.5	0.24-0.60
SSA	69	1.38	1.06-1.70
JRA	1	0.02	
OA	357	7.14	6.43-7.85
STR	185	3.7	3.18-4.22
Connective tissue	1	.02	
Infections	93	1.86	1.49-2.23
SRD	449	8.9	8.19-9.77
Vertebral spine	83	1.66	
Trauma	24	0.48	
M&N	27	0.54	
Others	7	0.14	



# LOGISTIC HURDLES

- Manpower
- Health volunteers
- Doctors
- Budget
- Medical facilities

# CONCLUSIONS

- Unrecognised Aches ,woes and Pains are the Submerged part of the Ice berg in the Community.
- Dominance of Soft tissue pain and rheumatism and degenerative disorders.
- Psychosomatic component?
- Need for Life style modifications-Community education programmes.
- Health economics to be explored.

# **ACKNOWLEDGMENT**

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