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PREVALENCE STUDIES OF CHRONIC PAIN USING (MDHAQ) IN BHAVANINAGAR A DEVELOPED VILLAGE IN WESTERN MAHARASHTRA

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ABSTRACT

The study was performed using multidimensional health assessment questionnaire to quantify the prevalence of pain among the rural patients and to describe the potential determinants of pain in rural population. The study describes the prevalence of pain among rural area and analyzes its determinants, as chronic pain is a major problem in the rural community and a detailed understanding of the epidemiology of chronic pain is essential for efficient management of chronic pain in primary care.

Keywords: Rural, Chronic Pain

INTRODUCTION

Pain is a common symptom and affects a large number of patients with many types of disease, both within the community and in a variety of clinical settings [1]. Chronic pain in elderly people has begun to receive serious scientific consideration. Studies of the prevalence of pain within samples of elderly people have produced more consistent results. Self-reported measures play a central role in the assessment of chronic pain [2]. A multidimensional health assessment questionnaire (MDHAQ) is useful in standard care of patients with all rheumatic diseases in a busy clinical setting [3]. Study shows that the Indian HAQ is a reliable,

sensitive and valid instrument for measuring functional disability. It can be self-administered and was found to be eminently suitable for Indian population both at home and abroad.

[4] The aims of this study were to quantify the prevalence of pain among the rural Indian patients and to describe the potential determinants of pain in this population. Bhavaninagar has an population of 3400 [1800 males & 1600 females] and qualifies itself to be called as a developing village because it contains all the necessities like schools, professional colleges, clinics, transport facilities, banks, etc. The evaluation of pain using the multidimensional health assessment questionnaire was designed to answer two study questions: (a) What is the prevalence and types of pain complaints in rural areas and (b) What is the percentage of home patients with pain that can be assessed using several available pain-intensity scales and a HAQ?. The Indian HAQ comprised of 12 questions (nine basic and three advanced ADL, on the standard HAQ format) relevant to the Indian population. The total score divided by 12 gave the disability Index. A interviewer assisted verbal Marathi translation was also done, for the use of non-English speaking patients. The study was designed by surveying the house residents of

Bhavaninagar village. The patients suffering from chronic pain for more than six months evidenced from medical history and aged in the range of 35-100 years were found to be eligible for pain assessment as the cognitive impairment among elderly presents a substantial barrier to pain assessment and management.

The questionnaire was self-administered with minimal instruction and took, on average, about 15 -20 min to complete. Pain Intensity was recorded by Pain Scales viz. Present Pain Intensity McGill (PPI) and Visual Analog Scale (VAS). In addition a six-point combination word number scale an additional subscale of the McGill Pain Questionnaire was used as an indicator of pain intensity.

Reliability of the construct was checked by administering the questionnaire to 34 patients table 1A. The results of this survey are presented together with exploratory analyses that assessed the independent roles of each determinant of pain after adjusting for all the other variables. The details are summarized in **Table IB, IC and Figure 1**.

Overall, 29 out of the 34 evaluated patients suffered pain at the time of interview. All of the patients reported severe back pain problems along with stiffness in the neck and frequent pain in the knees. The most common etiological

cause for the chronic pain was found to be Arthritis and Neuropathy.

The highest disability scores were recorded in response to item no. 6, 7 and 10 .i.e. squatting in the toilet or sitting cross-legged on the floor, Bend down to pick up clothing from the floor? And Walk three kilometers. Disability index values obtained with 12-ADL HAQ were high the mean Disability index was 4.91. Pain Intensities recorded by McGill (PPI) and (VAS) were found to be 1.360.

An epidemiological approach, of the study describes the prevalence of pain among well-defined rural area and analyzes its determinants, as a significant deterioration in health related quality of life and psychological well being is observed. Evidence reviewed in this paper suggests that a majority of elderly people experience pain of an intensity sufficient to interfere with normal functioning in day to day activities and that a significant proportion of these individuals do not receive appropriate treatment for this pain. The failure to adequately treat the elderly patient may be due to several factors. Three significant factors which may contribute to

the inadequate treatment of geriatric pain patients are (1) lack of proper pain assessment; (2) potential risks of pharmacotherapy; and (3) misconceptions regarding both the efficacy of non-pharmacological pain management strategies and the attitudes of the elderly towards such treatments. It is necessary for proper planning and delivering effective responses to this medical problem as a significant proportion of elderly people do not receive adequate pain management. To conclude Chronic pain is a major problem in the rural community and a detailed understanding of the epidemiology of chronic pain is essential for efficient management of chronic pain in primary care.

CONCLUSION

The intensity of pain increases as the age increases that is the pain is more severe in old person than that of young person. Chronic pain is a major problem in the rural community and a detailed understanding of epidemiology of chronic pain is essential for efficient management of chronic pain in primary care.

Table 1A: Population census of the participants of pain survey

Name of Village	No. of Patients				Total no. of Patients
	Age Below 50		Age Above 50		
	Male	Female	Male	Female	
Bhavaninagar	2	7	16	9	34

Table No IB: Demographic Data, Pain Location, and Etiology of Pain Complaints Identified from Medical Record (N = 34)

Characteristics	Value
Age in years (mean ; range)	55.82 [35-92]
Sex (mean ; range) Male Female	18 [35-92] 16 [35-84]
*Pain Location	Frequency N (%)
Normal no. of patient	5 (17.70%)
Back	8 (23.52%)
Knee	10 (29.41%)
Foot/ankle	6 (17.64%)
Shoulder	3 (8.52%)
Neck	2 (5.88%)
Wrist	1 (2.94%)
Headache	1 (2.94%)
Hip and Abdomen	3 (8.52%)
Chest wall	1 (2.94%)
Elbow	1 (2.94%)
Heart/Angina	10 (29.41%)
Rectal/Pelvic	0 (0%)
Face/Jaw	0 (0%)
Etiology	Frequency N (%)
Diabetes	12 (35.29%)
Arthritis	1 (2.94%)
Migraine	1 (2.94%)
Asthma	0 (0%)
Old fractures	1 (2.94%)
Malignancy	0 (0%)
Muscle spam	1 (2.94%)
Paralysis	1 (2.94%)

Pain Intensity as measured By McGill Pain Intensity Subscale

Table IC: ADL-wise mean score for rural HAQ and pain intensity scores measured by Mc Gill pain intensity subscale (PPI) and visual analog scale

Scale	0	1	2	3	4	5
Feature	No Pain	Mild	Discomforting	Distressing	Horrible	Excruciating
Total	3	22	7	2	0	0
%	0	64.70	20.58	5.88	0	0
(McGill PPI) = 23.8						
II] 100mm Visual Analog Scale for assessment of severity pain						
No pain [---] Very severe pain						
VAS = 1.360						

Figure 1: Patient suffering from pain

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