



Attitudes towards Assessment and Management of Chronic Pain amongst Clinicians at a Tertiary Care Facility, Kenya

Rop S*

Department of Rehabilitation Sciences, Jomo Kenyatta University of Agriculture and Technology, Kenya

***Corresponding author:** Solomon Rop, Department of Rehabilitation Sciences, College of Health Sciences, Jomo Kenyatta University of Agriculture and Technology, Kenya, Tel: 0710737192; Email: ropsolopt@gmail.com

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Abstract

Background: Chronic pain being a common medical condition seen by clinicians has a significant socio economic and health burden to clients, clinicians and the health institution. Patients with chronic pain presents with limited activities and participation restrictions affecting their quality of life. Previous studies have shown clinician's negative attitudes towards management of chronic pain.

Objective: To determine, attitudes of clinicians towards assessment and management of patients with chronic pain in a tertiary hospital in Kenya.

Methods: This was a descriptive cross-sectional study designed to utilize a quantitative approach, a questionnaire containing 77 items was used to collect data, this study adopted census method of sampling because of the small number of the study population (n=240). A total of 153 clinicians volunteered to participate in the study. Data was analyzed using Statistical package for social sciences (SPSS) Version 24. Descriptive statistics was calculated and presented in summary tables and bar graphs. Chi-Square test was calculated to determine the association between sociodemographic characteristics and level of knowledge, attitudes and practice. The statistical significant was accepted at P – value less than 0.05.

Results: The response rate was 83.3% (n=153). Only 9% (n= 14) of the respondents believed to have positive attitudes. While 62% (n=95) had negative attitudes on cognitive/behavioral management of chronic pain. Few participants (9% n=14) had positive attitudes in assessment and measurement of chronic pain.

Conclusion: The current study supports the concern about negative attitudes and poor practices among clinicians in tertiary healthcare institution. We believe that continuous medical educational on chronic pain, adopting chronic pain guidelines, and research on pain curriculum in medical training institutions are needed to improve clinician's knowledge, attitudes and practices which may result to better chronic pain outcome.

Keywords: Chronic Pain; Attitudes; Health Workers

Abbreviations

NACOSTI: National Commission for Science, Technology and Innovation; KASRP: Knowledge and Attitudes Survey Regarding Pain; RPKAQ: Revised Pain Knowledge And Attitude Questionnaire.

Introduction

Despite the recent advances in understanding the algorithm of diagnosing and treating clinical pain, many clinicians globally continue to exhibit negative attitudes and misconceptions about chronic pain raising public health concern [1-5]. In addition, Chronic Pain being is one of the most common clinical symptoms reported by patients in referral facilities it has continue to impose a significantly socio-economic and health burden on patients, clinicians and the health care sector [6]. Conceptualizing chronic pain as; “an unpleasant sensory and emotional experience associated with actual or potential damage of tissue” [7] makes it complex to comprehend. Furthermore, in regard to relationship between chronic pain and tissue damage, the pain does not provide a measure of state of the tissue as it’s modulated by many factors which includes; somatic, psychological and social factors, therefore, the relationship between pain and tissue becomes less predictable as pain persist makes it complex to understand [8]. Chronic pain is both sensory and emotional components and thought to be without real biological cause and persist beyond the normal time for tissue healing [7,9,10]. Patients with chronic pain often report high levels of pain intensity, activity limitation, participation restrictions and poor quality of life which come with high medical costs as a result of prolong utilization of health care services [11]. In practice, the outcomes of patients with chronic pain are often poor because of inaccuracy among clinicians in choosing and administering appropriate treatment [12]. Inaccurate prescription for patients with chronic pain may be a function of misclassification or misdiagnosis which lead to inappropriate treatment and undesirable outcomes as well as increased health and social costs [1,13].

Whereas the goal when managing people with chronic pain is to relieve pain and improve function; a bio-psycho-social approach is currently preferred for improved outcome especially when provided by a multidisciplinary team [8,14-16]. However, research evidence has shown that most clinicians utilize a biomedical approach which is regarded as a retrogressive practice that is often associated with poor outcomes, reduced quality of life, increasing disability and high cost of health care [15,16]. According to Gustafsson and Borglin [17] improving clinician’s level of knowledge positively influences their attitudes and practice for effective management of patients with chronic pain. However most of

the studies have been conducted in developed countries such as UK settings, USA and in Asian countries [3,18,19]. In the African region, information regarding, attitudes of healthcare professionals about assessment and management of patients with chronic pain is relatively scanty. To address this gap, the current study was to determine the attitudes on assessment and management of chronic pain amongst clinicians in a tertiary care facility in Kenya. This would establish a baseline for further research and inform future review of healthcare policy, capacity development programs and practice.

Materials and Methods

This cross-sectional survey was conducted Tenwek Hospital in Kenya from January 2020 to May 2020 after obtaining approvals from the JKUAT and Tenwek Hospital ethical and review committees and authority from National Commission for Science, Technology and Innovation (NACOSTI). The census method was adopted due to the small study population (n=240) all being clinicians who volunteered and were directly managing patients with chronic pain. The revised pain knowledge and attitude questionnaire (RPKAQ) and a section adopted from the knowledge and attitudes survey Regarding Pain (KASRP) questionnaire which mainly focuses on pharmacological management of pain was used to collect data. Both the RPKAQ and KASRP questionnaires have undergone cognitive testing and validation in different settings and cultures and have been found reliable (Cronbach’s alpha of 0.65 and 0.80 respectively); which is acceptable [4]. Collected data was entered twice into Microsoft Excel sheets and entry errors corrected. The clean data MS Excel sheet was imported into the Statistical Package for Social Sciences, version 24.0. Descriptive statistics were then calculated. Chi-square test of association between sociodemographic characteristics and the level of knowledge attitudes and practices was also calculated (level of statistical significance at P-value less than 0.05).

Results

A total of 153 clinicians volunteered to participate in this study. Male participants (52%; n= 79) were more than females (48%; n=74). Regarding age, majority of the participants (55 %; n=84.) were aged less than 30 years followed by those aged 31-40 (30%; n=47). Almost three quarters (71%; n= 108) of the participants had less than 5 years of experience. Only a handful (17%; n=27) had 6 plus years of experience. According to the participants level of education, majority had college education (70 %; n=106). Half of them were nurses (50%), followed by Clinical Officers (15%) with Physiotherapists (2%) and Dentists (2%) having the least representation as illustrated in Table 1.

Characteristic	Frequency (n)	Percentage (%)
Gender		
Males	79	52%
Females	74	48%
Age Group		
< 30 Years	84	55%
31-40 Years	47	30%
41- 50 Years	19	13%
> 50 Years	3	2%
Years of Clinical Practice		
1-5 Years	108	71%
6- 10 Years	27	17%
>11 Years	18	12%
Level of Education		
College Diploma	106	70%
Bachelor's Degree	31	20%
Master's Degree	8	5%
Post graduates degree	8	5%
Clinician Cadre		
Nurses	77	50%
Clinical Officers	23	15%
Medical Officers	14	9%
Physiotherapist	3	2%
Consultant	7	4%
Residents	13	8%
Anesthetists	8	5%
Dentist	3	2%
Oncology Team	5	3%

Table 1: Socio-demographic characteristics of participants (N=153).

Level of Knowledge and Attitudes on Assessment and Management of Chronic Pain

Majority of the participants (91%; n=139) had inadequate knowledge and attitudes (scored below 75%) on assessment and management of chronic pain. With regard

to their level of knowledge of chronic pain, developmental changes in pain perception (31% n= 48) had the majority and physiological basis of pain had the least number of participants with adequate knowledge and positive attitudes (10% n=16) as illustrated in Table 2 & Figure 1.

Level of knowledge and attitudes on Chronic Pain	Adequate knowledge	Inadequate knowledge	Average score
	n (%)	n (%)	
Physiological Basis of Pain	16 (10%)	137 (90%)	61.7% (12.6)
Psychological Factors of Pain Perception	21 (14%)	132 (86%)	60.7% (13.9)
Developmental Changes in Pain Perception	48 (31%)	105 (69%)	64.2% (18.9)

Knowledge and attitudes on Assessment & management			
Assessment and Measurement of Pain	14 (9%)	139 (91%)	51.7% (15.9)
Cognitive/ Behavioral Methods of Pain Relief	95 (62%)	58 (38%)	78.5% (14.9)
Pharmacological management of chronic pain	11 (7%)	142 (93%)	54.5% (11.8)
Overall scores	14 (9%)	139 (91%)	61.9% (7.5)

Table 2: Level of knowledge and attitudes on Chronic Pain.

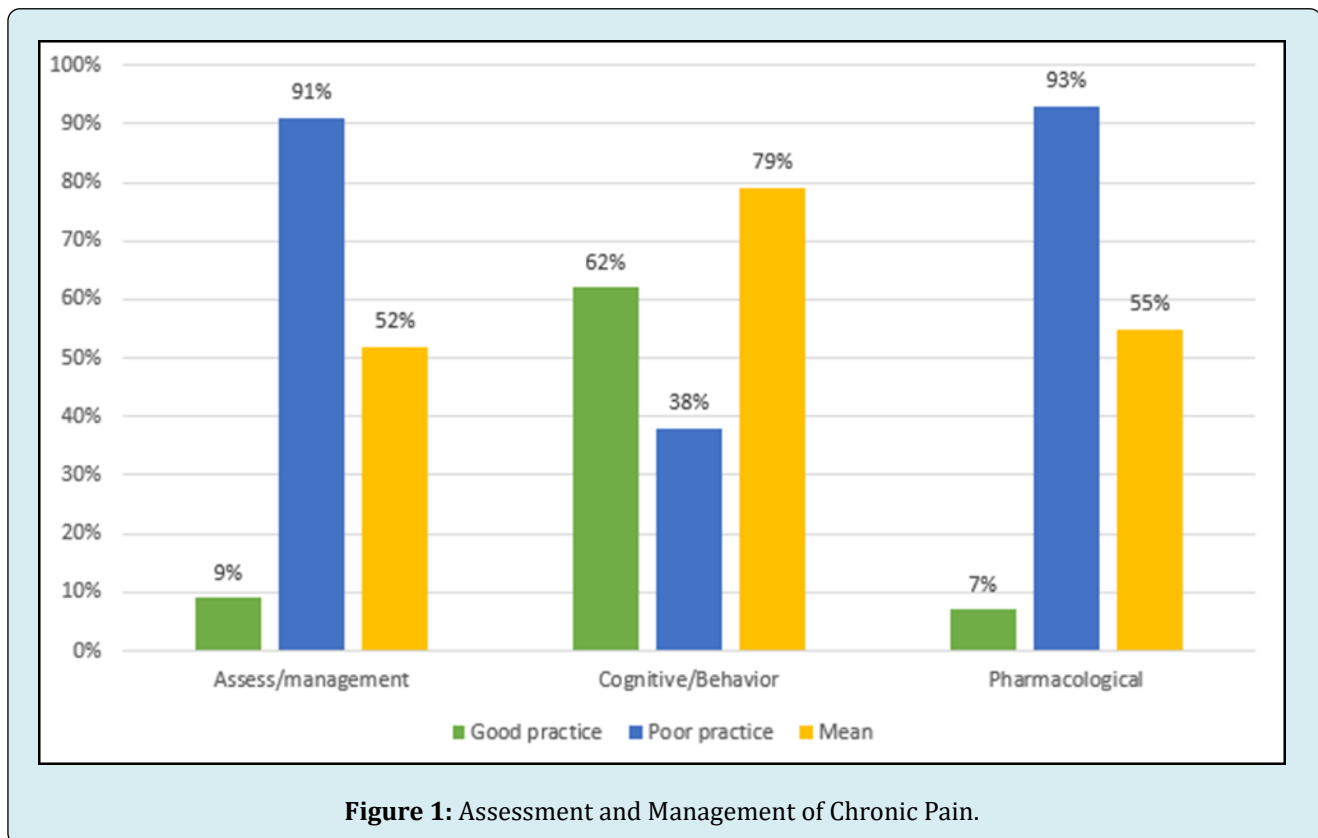


Figure 1: Assessment and Management of Chronic Pain.

Discussion

The study is one of the few that have attempted to examine the attitudes of clinicians managing chronic pain in a tertiary hospital in Kenya. The results are a source of concern as majority of the participants (91%; n=139) had inappropriate attitudes towards management chronic pain. These results are similar to previous studies that have found clinicians have negative attitudes regarding management of chronic pain [4,3,12]. The finding of the current study may have been influenced by the fact that the majority of participants were diploma nurses (70% n=106) some with less than 5 years of clinical. The results resonate with previous studies that showed that nurses lacked requisite attitude and expertise to evaluate and manage chronic pain [1,20,21]. Further, experience is paramount to successfully manage chronic pain which majority of the nurses in the current study lacked. This view is supported by Miró, et al.

[22]; Shipton, et al. [23]; Enskär, et al. [24], Bouri, et al. [25] and Nuseir, et al. [1] studies that have showed that clinical experience and level of education influence clinician practice.

Though, the study examined wide range of clinical cadres, there was uneven distribution of among them; therefore, generalizing the results of this study to a larger population must be done cautiously due to its small study population. Despite this weakness, the results of this study may provide useful information on the level of knowledge, attitudes and practice of clinicians regarding chronic pain to the region and the study site.

Few studies in the region are similar to our findings; A Kenyan study by Jin [26] (n=96) which evaluated the knowledge and attitudes of various health care workers regarding pain assessment and management in children, in

the country's national referral hospital, found a significant knowledge gap among participants with over half (58.3%) performing poorly, while an Ugandan study by Kizza, et al. [27] found that 73.5% of nurses perceived to have inadequate knowledge in key concepts of pain management. Furthermore, a South Africa study by Clenzo, et al. [4] found 14.5% of participants with adequate knowledge. The results of the current study are in contrast to the UK, south Africa and Sweden (n=106) comparative study amongst nurses working with children with cancer by Enskar, et al. [24] who found that participants had high level of knowledge and appropriate attitudes towards pain management.

Regarding the current practices our study found only 9% (n= 14) of participants use best practice, which is similar to previous studies by Al-Quliti and Alamri [3] and Clenzo, et al. [4], who found 4%; (n=8) and 5.7% (n=6) of participants respectively had adequate knowledge in this domain. Similarly, on pharmacological domain, participants performed poorly which corroborates the findings of the study conducted by Kheshti, et al. [12]. The result is disturbing because it highlights a poor efficacy of most pain interventions people get and risk of chronification [28,29]. Interestingly, by the current study recorded good performances in the cognitive/behavioral aspect of chronic pain intervention compared to all other domains. This is a non-pharmacological aspect of pain intervention which focuses mainly on psychological, social and educational aspect of pain intervention which has been reflected by previous studies to be effective when combined with other modalities [30,31]. Undoubtedly, the current study indicates the need to improve clinician's level of knowledge, attitudes and practices in order to reduce the burden associated with chronic pain. A similar view was expressed in previous studies on healthcare providers knowledge, attitudes and practice with regard to pain management [6,11,32,33]. Furthermore, educational intervention particularly continuous medical education and adopting chronic pain guidelines have been recommended by earlier studies to improve clinician's knowledge, attitudes and practices [17,33]. The current study results form a baseline for further research in a wider population and may inform future review of healthcare policy, training curricula and practices in healthcare [34,35].

Conclusion

Patient with chronic pain continue to suffer due to clinicians' unhelpful attitudes and generally poor practice. Educating clinicians on best practice about assessment and measurement of chronic pain, and encouraging self-initiated continuing medical education is critical. The results have an implication on training curricula and quality of healthcare in the region.

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