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The Trend of Presentation and Profile of Patients with Low Back Pain Presented to Abubakar Tafawa Balewa University Teaching Hospital (Atbuth), Bauchi

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ABSTRACT: *Low Back Pain (LBP) is one of the most common musculoskeletal disorders, a leading cause of activity limitations and work absence resulting in great economics burden. Early multidisciplinary intervention and education of patients with LBP is associated with good prognosis. This research aimed to find the trend of presentation and profile of patients with LBP. A retrospective research design was used to review the patients' case notes with LBP that presented from January 2010 to June 2017 and data on the stage of LBP, place of referral, sex and age were reviewed. Total of 121 files were booked and reviewed of which 83.47% were chronic LBP patients while 16.52% were acute. About 67.77% out of 121 were referred from health care unit (peripheral hospital) and 32.23% were walk-in patients with male dominance of 66.94% and mean age of all patients is 48.1years. On the other hand, only 49.59% were referred to physiotherapy unit of which 91.67% referred at chronic stage. The research reveals late presentation and referral for patient with LBP. Also shows poor engagement of physiotherapy in the management of LBP patients. It recommends the need for enlightening the public and other health professional on the role of physiotherapy in treating LBP especially at acute stage.*

KEY WORDS: low back pain (LBP), acute, chronic and referral.

INTRODUCTION

The global prevalence of general disability is highest in sub-Saharan Africa (Murray and Lopez 1997a). Low Back Pain (LBP) is one of the most common musculoskeletal disorder affecting young and old age and among most reason for consulting health personnel in the industrialized countries (Chou et al, 2007; (Vantulder et al 2000). Also a leading cause of activity limitations and work absences resulting in great economics burden to patient, relatives, community and work places (Patrick et al, 2014). LBP is pain limited to the region between the lower margins of the

12th rib and the gluteal folds (Galukande *et.al* 2005). The most apparent difference in disability prevalence is between the developed and developing worlds (Murray and Lopez 1997b), with the most frequent cause of disability being musculoskeletal disorders (WHO 2003).

The duration of LBP is associated with a mild variation but most clinicians believe that acute LBP is the one that last for less than 4 weeks, sub-acute between 4 to 12 weeks and chronic as one that last for 12 weeks or more (Cooper 2015). According to Kinkade 2007, acute LBP is a pain that last up-to 6 weeks' duration.
Management of patients with LBP is a multidisciplinary approach that requires adequate assessment, treatment and ergonomics education and promotes desired result for patients to return to functional level at minimum period (Moffet and Mclean 2005).

Physiotherapy play avital role in the management of patients with LBP by proper assessment and setting treatment plan, i.e. stabilization exercises, ultrasound, manipulative therapy, ergonomics education and complimentary and alternative-therapy (Sokunbi, 2018; Cassaza, 2012; kinkade, 2007). Also, early physiotherapy intervention helps in preventing spinal surgery to LBP (Campbell at el, 2012). Patients with LBP mostly reappear after discharge with the same or relative complain, that can be prevented through proper ergonomic training and counseling by physiotherapist (Cooper, 2015; Kinkade, 2007).

This research aimed to provide data on profile of patients with LBP presented to ATBUTH, and to assess trend & frequency of referrals.

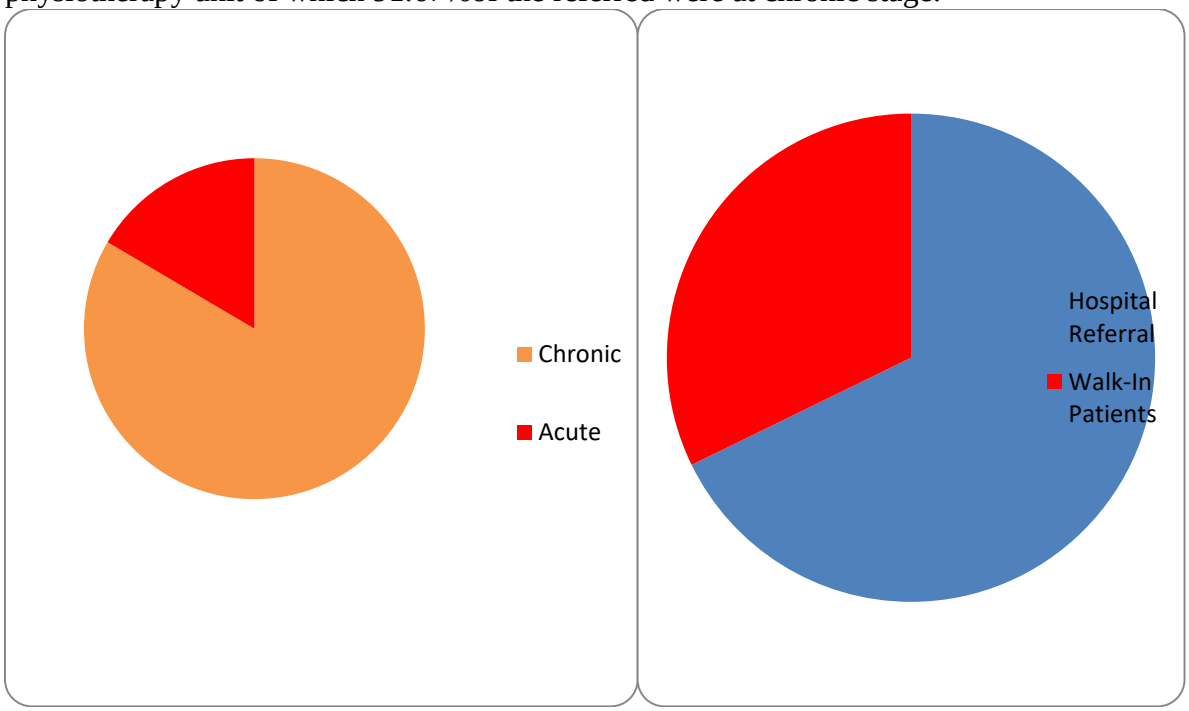
METHODOLOGY

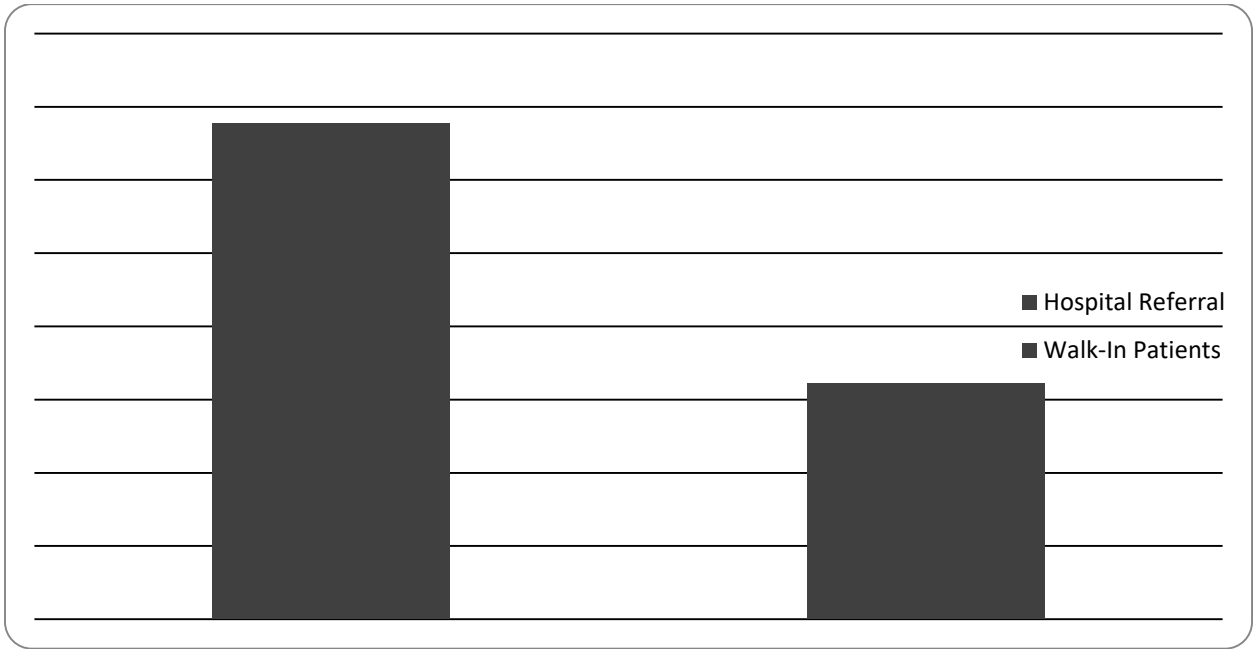
A retrospective research design was used to review the case notes of patients with LBP presented from January 2010 to June 2017. After approval of proposal by the hospital research committee, introduction letter was sent to head of Health Information department and record unit at General outpatient department (GOPD), Surgical Outpatient Department (SOPD), National Health Insurance Service (NHIS) and Physiotherapy Department of ATBUTH. ATBUTH is a tertiary health care institution founded in 2010 in Bauchi the capital city of Bauchi state, north-eastern Nigeria. The stages of LBP, place of referral, sex and age were taken using designed data collection sheet and data was analyzed and presented in pie charts and bar charts.

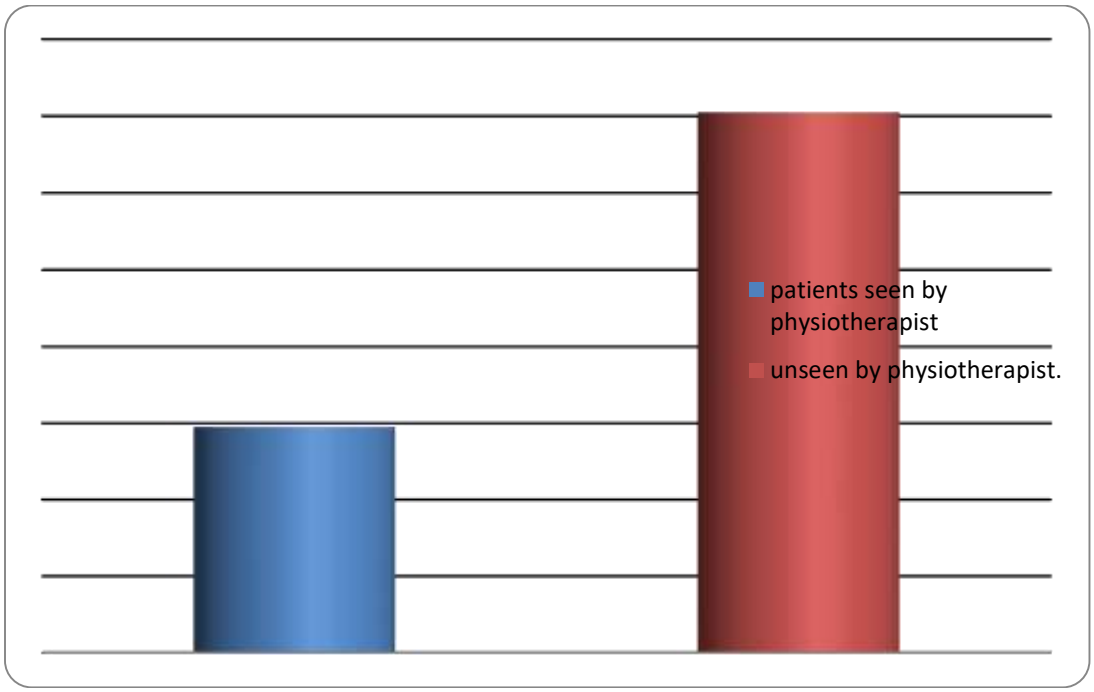
RESULT

A total of 121 files were booked and reviewed of which 83.47% were chronic LBP patients while 16.52% were acute. About 67.77% out of the121 were referred from health care units (peripheral hospital) and 32.23% were walk-in patients. Male dominance of 66.94% was observed and the

mean age of all patients was 48.1years. On the other hand, only 49.59% were referred to physiotherapy unit of which 91.67%of the referred were at chronic stage.







DISCUSSION

The study was conducted to find the profile of patients with LBP presenting to ATBUTH, how soon they seek for professional attention, trend and frequency of referrals to physiotherapy unit. Result of this study showed that most of the patients presented to hospital at chronic stage of LBP, this replicate the findings of Sokunbi et al 2017 on the prevalence of LBP among nurses. The prevalence of LBP in this study was found to be 46.8% (Ogunbode, Adebusoye, and Alonge 2013). This is similar to the point prevalence of 46% LBP in a study amongst staff in a rural hospital in Nigeria (Omokhodion, Umar, and Ogunnowo 2000).

While LBP prevalence of 28% was reported among 1005 community clinic attendees interviewed in Cape Town, South Africa (Parker and Jelsma, 2010). In a review by Louw et al., 2007 of previous studies, high prevalence of LBP in Africa was reported compared to those found in developed countries. Most patients referred to physiotherapy from various units were at chronic stage which might be due to late presentation referral or lack of awareness for the role of physiotherapy at acute stage of LBP (Petersen et al, 2017). Even though studies support the assertion that early physiotherapy is more effective and prevent seeking option for spinal surgery in LBP (Hossain et al, 2015; Campbell et al, 2012).

Researches proved the effectiveness of physiotherapy procedures in treating acute and chronic LBP that include acupuncture, Transcutaneous Electrical nerve stimulation (TENS), ultrasound,

strengthening exercises and core stability exercises (Sokunbi *et al*, 2014; Mohammedali *et al*,2014). Our findings showed only 49.49% among the patients were referred to physiotherapy unit.

In addition, physiotherapist play vital role in encouraging an early return to normal function and biopsychosocial rehabilitation for functional restoration. As such, physiotherapy and other health professionals need to work closely in order to achieve the desired result for patients to return to functional level at minimum period (Moffet &Mclean, 2005).

Our result revealed higher incidence of LBP among male (66.94%), this might be due to environmental disposed lifestyle, pattern of work and accessibility to health care (Hossain et al, 2015). Point prevalence of LBP was higher amongst men compared with women (50.3% vs. 44.4%), (Ogunbode, Adebusoye, and Alonge 2013).While in contrast to our findings, female were more likely to develop LBP than males amongst rural hospital staffs (Omokhodion, Umar, and Ogunnowo 2000), this may not be unrelated to occupational predisposition.

Relatively old age patients mostly presented with LBP according to this study. Preventive measures such as back care and ergonomics education need be considered in general medical counseling, outreaches and educative points. (Sokunbi et al 2017; Mohammedali et al 2014). The prevalence of LBP increased gradually with age: from 44.9% for respondents younger than 30 years to 55.6% for the age group 51 years - 60 years. However, a reduction in the prevalence of LBP was observed after the age of 60 (Ogunbode, Adebusoye, and Alonge 2013) therefore LBP point prevalence potentially increases with age (Louw et al., 2007).

Though, it appeared that patient with LBP often presents late at outpatient physiotherapy unit which reduces the good prognosis, the lateness might be due to late referral, lack of awareness of the role of physiotherapy at acute stage or unprofessional and traditional believes (Petersen et al,2017). The causes and risk factors of LBP are multi-dimensional and multi factorial, so also vital in its management, therefore such causes differ from individuals to individual. The age, gender, obesity, pregnancy, trauma, smoking, the presence of other diseases, culture, education, economic status, and stress have been the subjects of most researches. Other topics considered include genetics of the individual, the biomechanical relations of the spine, the intervertebral disc, occupation, occupational postures, leisure activities and psychosocial aspects have all been considered in relation to LBP (Yates, Jelsma and Parker 2010).

CONCLUSION

It is concluded that most LBP patients presents at chronic stage and male were more affected. Also, engagement of physiotherapy in the management of LBP patients is relatively poor which might reduce the effectiveness of treatment. It is recommended that there is a need for enlightening the

public & other health professionals on the role of physiotherapy in treating LBP especially at acute stage.

Recommendation

There is need for further study to find the percentage discharged (recovered) patients due to conservative or surgical treatment and so also fail treated patients as the need for additional knowledge regarding the cause and prognosis of LBP is evident in this population.

Limitations of The Study

The absence of data on the total number of patients presented in the facility/hospital over the period, in order to extrapolate or determine the percentage (i.e LBP patients).
So also the case notes do not contain the kind of referral and aetiology of the LBP, therefore unable to determine which department/unit in the facility refers more patients to physiotherapy both at the acute or chronic stages or determine most prevalent causes of the LBP.

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