Prevalence of Anorectal disease among the patients attending health screening camp in different parts of Eastern Nepal: A cross-sectional study

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ABSTRACT

Background: Anorectal disease has a significant impact on patients' quality of life (QoL), and surgical treatment may further diminish QoL. The purpose of this study was to identify the prevalence of anorectal diseases, its management and improving the patient's quality of life.

Methods: Study is carried out in various health screening camps of eastern Nepal, the study was done in patients who attended the health screening camp with in period of three months. (Nov 2024-Jan 2025) The objective of study is to find prevalence of anorectal disease, its management and improving patient's quality of life. All patients with anorectal conditions presented and managed at our camp were included. Surgical intervention was done in the hospital. Excluded were patients less than 20 years old, pregnant and lactating mother.

Results: The patients with anorectal diseases presenting in camp with ages more than 20 years old, both genders were included. All patients were examined by surgeon. 366 patients with anorectal diseases were included in study. Most patients were female 256(69.95%) and male 110(30.05%). Most common anorectal diseases were Hemorrhoids (59.56%), Anal Fissure (12.84%), Rectal polyp (9.56%), and Fistula in Ano (8.75%). Out of 366 patients with anorectal disease, 146 were given surgical treatment and 220 were managed with conservative treatment. This study may contribute to epidemiological knowledge about the prevalence of anorectal disorders.

Conclusion: Hemorrhoids, anal fissure and rectal polyp, were the common anorectal conditions.

INTRODUCTION

"Anorectal diseases—including hemorrhoids, anal fistulas, anal fissures, perianal abscesses, and perianal pruritus—are among the most common conditions encountered in clinical practice. A which were mainly related with the diet, bowel habits, stress. In an epidemiological study in the United States of America (USA), it was revealed that about 1 million (or 4.4%) of Americans had symptoms due to hemorrhoids.[1]

Anorectal disorders are either structural or functional abnormalities of the pelvic floor in patients with symptoms, such as difficulty defecating, fecal incontinence, rectal bleeding, anorectal pain, and rectal prolapse. [2,3]

Anorectal disorders seem to increase progressively and their prevalence in the general population probably tends to be higher than seen in clinical practice in developing countries like Nepal.

In conservative society or due to illiteracy, the anorectal disorders are considered as some sort of a divine curse and a matter of disgrace for a person in backward social set up. Due to this, the patient often put up with symptoms for long time, before seeking medical care. These conditions are extremely distressing and embarrassing for the patients and usually these patients put up with their symptoms for long time, before seeking any medical advice or care. Literature has reported that up to 80 % of the population with symptomatic anorectal pathologies have not consulted a specialist regarding their issues [4,5].

Statistically, this volume is a huge burden over health services and society too. The commonest factors which make these diseases a phenomenal burden on society comprises of Illiteracy, social taboos, negligence, poverty, maltreatment, self-treatment, mismanaged obstetric events, anal sexual habits and unsupervised surgical interventions [6]. Ano-rectal diseases are one of the common diseases which increase at an alarming rate, due to delayed presentation and embarrassment. patients in this region may present late due to lack of proper education about anorectal diseases and may be due to lack of tertiary hospital.

METHODOLOGY

This cross-sectional study was conducted in across various locations in Jhapa, Sunsari, Ilam and Saptari districts in Nepal. The study was done in patients who attended Health camps over a three-month period. Simple random sampling technique was employed to collect the data, after written permission by the Ethical Committee. The patients with only anorectal diseases presenting to camp with ages more than 20 years old, both genders were included. Patients with Anorectal carcinoma were excluded from our study. All patients were examined by Registered surgeon. All necessary investigations were arranged for the diagnosis of these disorders. The data were recorded, and analyzed using Excel- 2019 with the help of a medical statistician.

RESULT

The mean age was 41.49 years and Most of the patients 129(35.24%) were in their fourth to fifth decade of life, whereas 98 (26.77%) were at of age 30th. (10.38% less than 20 and 9.56% more than 60 years). More than two third of our patients were females and male to female ratio was 1:2.3.

A total of 366 patients with anorectal disease were analyzed during study period. Among them 70% were female (Fig-1). Female dominance has been seen in our patients

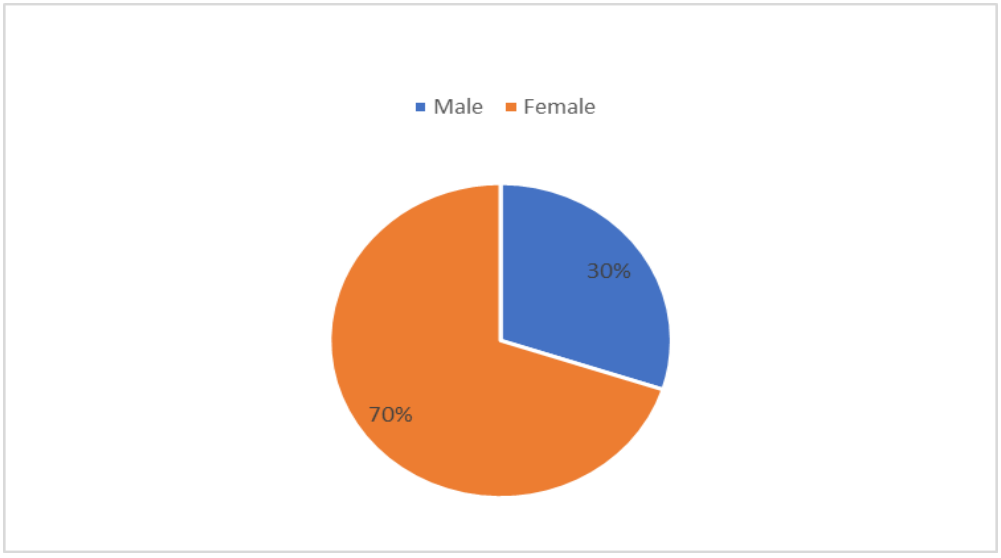

Figure 1 Gender Distribution(n=366)

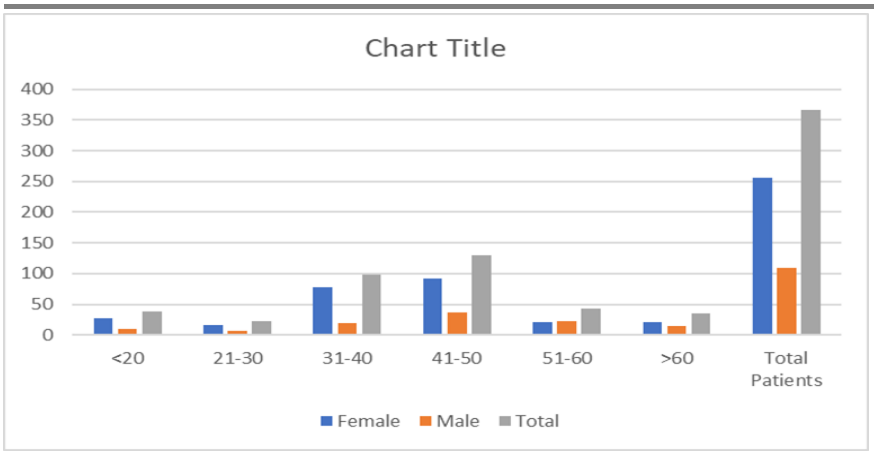

Figure 2 Age wise distribution

Fig. 2 shows Age distribution of patients with Anorectal diseases. Out of 366 patients with anorectal diseases 110 were male and 256 females. Maximum patients were in age group between 41- 50 years.

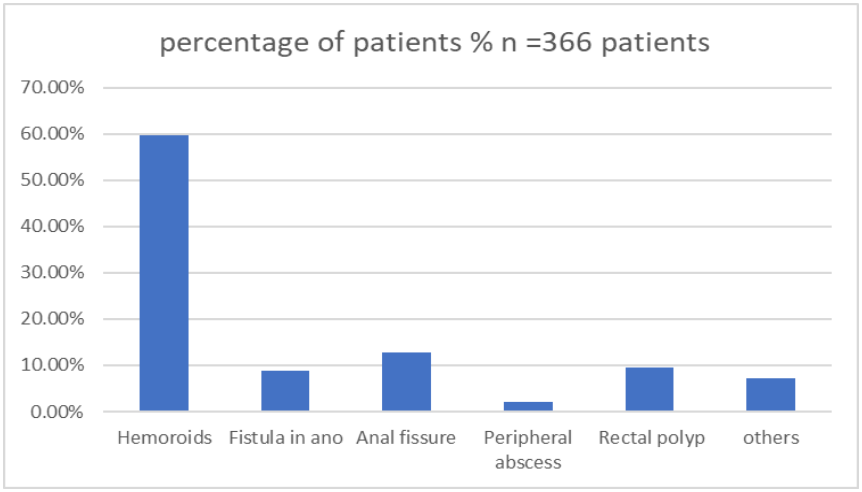

Figure 3 Prevalence of Anorectal Diseases

Fig. 3 shows Prevalence of Anorectal diseases in patients . Most common anorectal diseases were Hemorrhoids (59.56%) , Anal Fissures (12.84%) ,Rectal polyp(9.56%) and Fistula in Ano (8.75%).

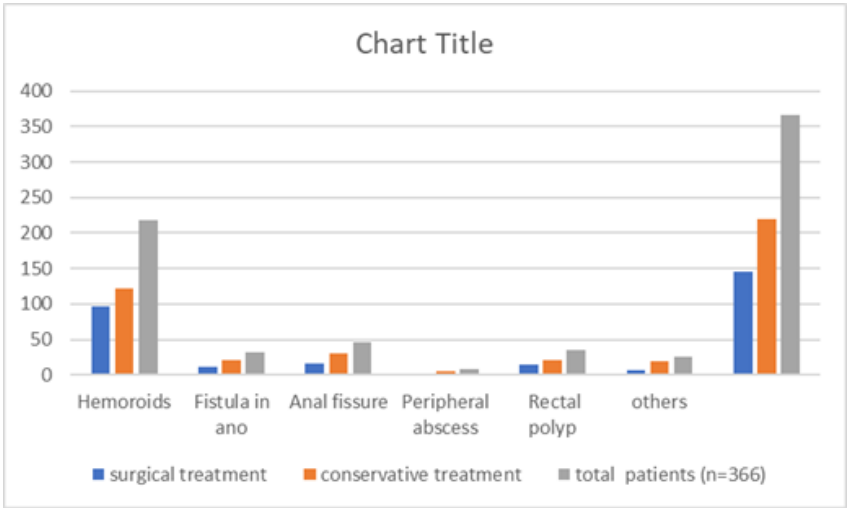

Figure 4 Treatment of Patient

Out of 366 patients, 146 were given surgical management and 220 patients were manged conservatively.

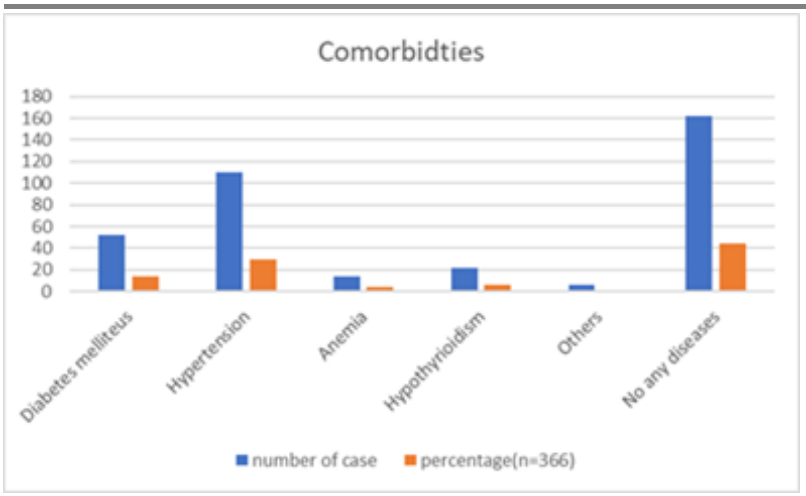

Figure 5 Co-Morbid conditions

Fig 5 shows Hypertensive patients were more in number with anorectal disease followed by diabetes mellitus

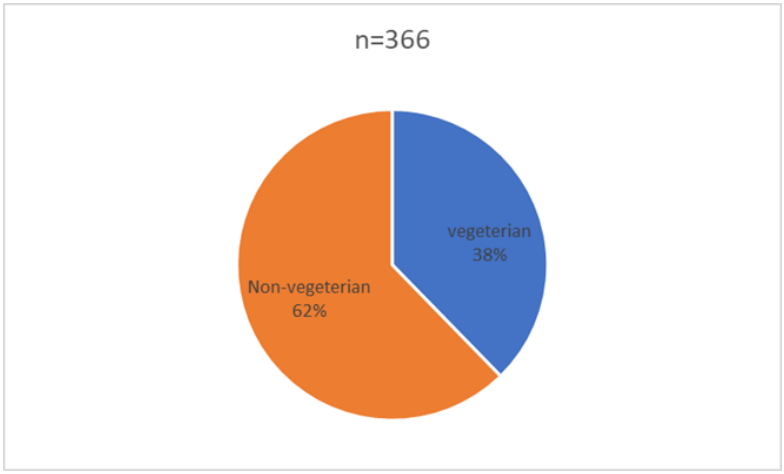

Figure 6 Dietary Habits

In our study, most of the patients were non- vegetarian (62%) and 38% of patients were vegetarian.

DISCUSSION

The literature shows that hemorrhoids, anal fissure, anal fistula, rectal prolapse are among the commonest pathologies reported [7,8]. In our study Out of 366 patients with anorectal diseases 110 were male and 256 females which is comparatively dissimilar with other various studies. As our study was conducted in rural areas where number of females were housewife who are free to attended our health screening camp. Maximum patients were in age group between 41- 50 years. Out of 366 patients with anorectal disease,146 were given surgical treatment and 225 were managed with conservative treatment. Among anorectal disorders major case load comprises of Hemorrhoids (59.56%), followed by anal fissure (13.38%) and anal fistula (8.75%) which is similar to other study conducted in Nepal Amit Man Joshi et al[13,14]. Sometime these benign disorders concomitantly presented with colorectal malignancy, or as a part of symptom of cancer. As the result shows number of Ano-rectal diseases are high in 41-50 years which is also shown by the co-morbid conditions of the patients which is 55.73% of patients was at least with one metabolic disorder. In our study, most of the patients with Non- vegetarian diet are having anorectal disease which is 62% compared to vegetarian Diet which is similar to other study conducted in india Ashish Mishra et.al [14] .Proper diet may have crucial role in reoccurring Ano-rectal diseases.

The Quality of life (QOL) is generally assessed or taken care of for individuals and in the modern or developed societies for their well-being. The education and awareness play a crucial role in improving the QOL of a

patient with the particular disease [9]. Literature shows that to define and assess the QOL of a patient is crucial with majority of anorectal disorders before planning a treatment. The Ferrer-Marquez et al [10], in their series of patients with anal fistula has reported that a moderate to high impact is exerted on the QOL of their participants which was higher in female as compared to male. The Owen et al and McKenna et al [11] has also shows a reduction in QOL as compared to the population having no anorectal disorder. However, only few studies indicate that in some patients the anorectal diseases are relatively well tolerated, which they corroborated with the fact that in initial six months of presentation of these symptoms, patients have worst QOL as compared to those having these symptoms for longer duration. [12]

Limitation of the study

This study is limited by a small sample size and short duration, which reduces statistical power and prevents the observation of long-term trends. Additionally, methodological constraints and data-dependent statistical analysis mean the findings demonstrate correlations rather than definitive causal relationships. Future research should utilize larger, longitudinal cohorts and advanced modeling to validate these results.

CONCLUSION

The anorectal diseases are more prevalent in our population with detrimental social impact on society. Ultimately, Ano-rectal in Nepal have transitioned from a minor medical issue to a lifestyle-driven epidemic. Addressing this requires a dual approach: intensifying public health campaigns to dismantle the social stigma so patients seek early care, while simultaneously promoting preventative lifestyle changes—such as high-fiber traditional diets and reduced sedentary behavior—across Nepal's rapidly developing.

"**Conflict of Interest**: The authors declare that they have no competing financial interests or personal relationships that could have appeared to influence the work reported in this paper."

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