ORIGINAL ARTICLE

Association of Gender with self-prescribed medication Patterns in Upper GI Patients

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ABSTRACT

Objective: To find out the association of gender with self-prescribed medication pattern for treating the upper GI disorders.

Place & duration of the study: from June 2017 to March 2018. Conducted in Karachi

Methodology: The cross sectional analytical study was conducted in different clinical setups of Karachi. Total 200 numbers of patients on the basis of non-probability convenient sampling method were included in this study. After ethical approval and verbal consent, the data was collected form the participants, who are willing to participate and self-medication for the relief of upper GI related problems. The data was presented in the form of frequency and percentage. To evaluate the association use Chi-square test with the set of level of significance at P=<0.05. The data was analyzed through SPSS version 30.0.

Results: The mean age of the participants in male was 42.14±0.51 and in females was 52.37±1.20. There was 59% male and 41% were females. Increase numbers of participants were observed in using combinations, herbals, remedies for self-treatment. The percentage of male and females were quite equal in some case. The male are more prone to acquired self-prescribing habits.

Conclusion: The prevalence of "Combinations" in all illness categories especially in Constipation and Gastroenteritis indicates that patients frequently choose self-tailored, multi-substance regimens over standardized monotherapy. The high volume of self-prescribed "Combinations" and "Remedies" emphasizes how important it is for patients to receive clinician-led patient education.

Keywords: self-medication, Upper GI disorders, IBS, Gastritis, Constipation, Remedies

INTRODUCTION

Upper gastrointestinal (GI) issues, including dyspepsia, gastritis, and gastroesophageal reflux disease, are the leading reasons of outpatient care worldwide. These diseases significantly burden medical facilities and have a detrimental effect on people's quality of life.[1] Because their symptoms are often modest and persistent, many patients choose self-management strategies to timely medical advice. Self-medication refers to the use of drugs, various herbal remedies, or home-based treatments without professional experience or supervision.[2] It is practiced world wide, particularly in developing or third world countries, where easy access to over-the-counter medications and limited healthcare resources contribute to its high prevalence.[3] Commonly used agents in upper GI conditions include antacids, proton pump inhibitors, H_2 receptor blockers, and various traditional or herbal remedies. While self-medication may only provide temporary symptomatic relief, inappropriate or excessive use can lead to delayed diagnosis, drug interactions and serious side effects. Gender has a major impact on health practices and the perception of illnesses.[1,4] Male versus female disparities in symptom reporting, healthcare-seeking behavior, and medication use have been observed in a range of clinical illnesses. Females are often thought to have a higher prevalence of functional GI diseases and may be more expected to use self-care strategies, whereas males may delay seeking medical advice or rely on natural healing approaches.[5] The availability of medical services, educational level, and societal factors all contribute to these gender-specific discrepancies. In Pakistan and similar settings, self-medication practices are deeply practiced by cultural customs, pharmacy accessibility, and lack of regulatory control over drug dispensing. Despite the high burden of upper GI disorders, there is limited evidence proving how gender influences self-medication and treatment patterns in over all patients. However, this study intend to evaluate the association of gender with self-medication and treatment plans among patients showcasing with upper gastrointestinal disorders, in order to better understand behavioral differences and guide targeted mediation for rational drug use.[1,5]

METHODOLOGY

It's a cross sectional analytical study with 200 numbers of participants involved in this study. After taking an ethical approval from the concerned authority and the verbal consent was taken by the participants. The study was conducted form June 2017 to March 2018, and the data was collected as non- probability convenient method from the different medical

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outpatient department setups in Karachi. Only those patients who preferred self-medication for the treatment of upper GI problem as they face on daily basis from last one year. Both gender with no age limitation were included. Those patients who do not used self-medication and was on prescribed medication by the consultants, disease other than upper GI and <18 years of age and not willing to participate were excluded. The data was collected and presented in the form of frequency and percentage, the chi-square test was applied for the statistical analysis. The P value was set at <0.05.

RESULTS

The mean age of the participants in male was 42.14±0.51 and in females was 52.37±1.20

There was 59% male and 41% were female

According to data the higher frequency was found in combination usage of self-prescribed medications mostly for the relief, 154 used for constipation, 110 for gastro and 104 for gastritis. It's a huge number and alarming as shown in (Figure: 1.1) and significant difference of <0.001 was found in comparison of male and female, as the more males was involved in use of combination form. (Figure 1.2)

About 68 participants involved in use of homeopathic drugs for gastro (Figure-1.1) and the significant difference was found with P=0.024 with increased usage among female participants. (Figure: 1.2)

In herbal medication the self-treatment practice were found in 60 participants for constipation and 77 for gastro. (Figure: 1.1) Now the significant difference were found with P=0.041, that indicates the maximum use among males as shown in Figure: 1.2

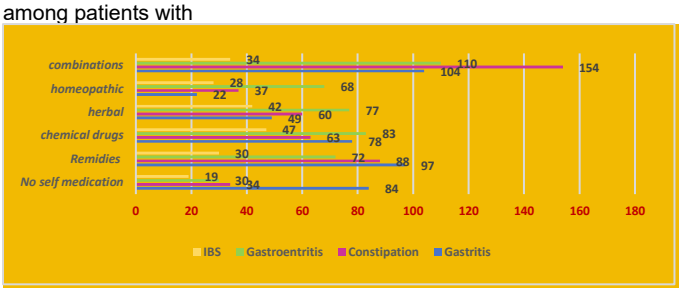
For chemical based drugs, the frequency was found 83 use for gastro, 63 for constipation and 78 for gastritis. (Figure: 1.1) according to the statistical analysis the significant difference of 0.047 were observed, and the usage among females were high. (Figure 1.2)

The frequency among user of remedies to treat the upper GI disorders was more in gastro about 72, 88 users for constipation and 97 for gastritis. (Figure: 1.1) The significance difference were noted on analysis, the P value =0.053 and male users are higher than females. (Figure: 1.2)

The picture for the participants without practicing the self-medications specifically for the treatment of gastritis were 84. The significance difference were found with P=0.037 and males were more incorporated in that category. (Figure 1.1 & 1.2)

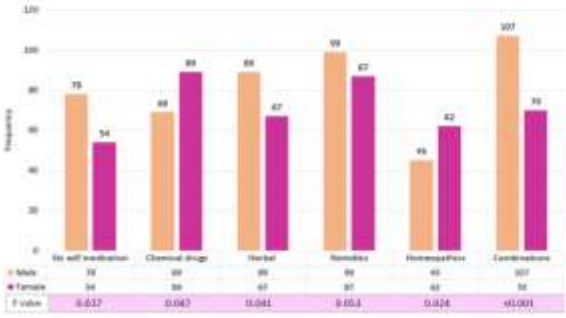
The complete picture is like, every participant was involved in self-medication with different pattern but selectively for some discomforts they don't preferred self-medication.

Figure: 1.1 shows Frequency of the self-prescribed participants among patients with



Upper GI disorders

Figure 1.2 shows the frequency of self-prescribed pattern of medication among the patients of Upper GI disorders



DISCUSSION

According to recent studies, the main causes of self-medication are the "non-serious" nature of GI symptoms including dyspepsia and GERD and the availability of over-the-counter (OTC) drugs. The study found that women are more prone to use chemical-based medications to treat digestive issues. This is in line with earlier studies that demonstrate women with GI problems often have deteriorating symptoms and less pain tolerance, leading them to seek out more "potent" or standardized pharmaceutical treatments such proton pump inhibitors (PPIs) and antacids.[6,7] However, the high frequency of "Combinations" and "Remedies" among men would suggest a tendency toward conventional or unofficial symptom treatment before seeking medical advice.[8] A growing global tendency toward "natural" medicines is shown in the substantial use of homeopathic (45 males, 62 females) and herbal (89 males, 67 females) treatments. Over the past six years, studies have shown that patients frequently believe herbal therapies have less negative effects than long-term pharmacological PPI use, which has been associated with micronutrient shortages in certain trials.[9] The peak in the "Combinations" category ($P < 0.001$) should be of particular concern to clinicians. Self-mixing chemical drugs with herbal or homeopathic remedies increases the risk of drug-herb interactions and may mask serious underlying conditions such as stomach ulcers or cancer by

temporarily lowering symptoms.[10] Constipation and gastroenteritis account for the majority of "Combinations" self-treatment (154 and 110 instances, respectively). Gastritis patients show a clear trend with the highest incidence of No self-medication (84 instances), in contrast to the chronic, manageable nature of IBS or constipation. This suggests that the immediate discomfort associated with gastritis may prompt speedier professional contact. Due to the availability of Over-the-Counter (OTC) medications and the perception that symptoms like bloating or irregular bowel movements are harmless, self-medication (SM) for GI diseases is a widespread occurrence.[11] Constipation and gastroenteritis are most frequently treated togethe. Recent studies have shown that patients often combine osmotic laxatives with probiotics or herbal teas (such as Senna) to achieve relief faster.[12] While this "polyself-medication" is effective in the short term, it can lead to electrolyte imbalances and increase the risk of drug-herb interactions, particularly in elderly individuals.[13] Figure 1's statistics show that women are significantly more likely than men to utilize chemical drugs. Research from 2020 to 2025 reveals that women are more aggressive in seeking standardized pharmaceutical therapy for GI pain, whereas men may first prefer conventional or "remedy-based" approaches.[14,15] The significant P-value for "Homeopathics" (P = 0.024), which suggests a wider acceptance of alternative medicine among women for the treatment of chronic symptoms, also suggests a stronger female preference.[16] A significant portion of gastritis patients avoid self-medication, in contrast to IBS patients who frequently employ herbal and homeopathic therapies (Figure 2). Since IBS is a functional condition with a variety of symptoms, patients often enter a cycle of "trial and error" with non-pharmacological therapy.[17] The high number of "Remedies" (97 cases) for gastritis indicates that many people continue to attempt acid neutralization at home before receiving a formal diagnosis of H. pylori or peptic ulcer disease.[18]

CONCLUSION

The prevalence of "Combinations" in all illness categories especially in Constipation and Gastroenteritis indicates that patients frequently choose self-tailored, multi-substance regimens over standardized monotherapy. The high volume of self-prescribed "Combinations" and "Remedies" emphasizes how important it is for patients to receive clinician-led patient education. In the absence of proper direction, these widespread self-medication practices increase the risk of concealing underlying ailments, delaying necessary medical treatments, and producing hazardous drug-herb combinations.

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