

ASSESSMENT OF THE COMMUNITY PHARMACY PRACTICE FOR ACIDITY IN MORADABAD

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<p>* For Correspondence: Department of Pharmacology and Clinical Research, College of Pharmacy, IFTM, Lodhipur Rajput, Moradabad-244001, U.P., India. Email: alikhan_najam@yahoo.co.in Phone: +919368212224; Fax: +91591-2451560</p>	<p>ABSTRACT Acidity is a common stomach disorders that create uneasiness in normal life. The World Health Organization (WHO) has defined acidity occurred due to increase or decrease of stomach acid which is also known as gastric acid. Basically, our stomach is meant to be acidic, thus it is important that it produces high concentrations of hydrochloric acid (HCL). When your stomach secretes hydrochloric acid, it simultaneously produces sodium bicarbonate which helps in protecting the lining of the stomach from being damaged by the acid. Therefore, when your stomach does not produce enough HCL, the secretion of sodium bicarbonate is also reduced, which may be a cause of stomach ulcer in the later stages. Generally in small cities large number of patients having acidity and related problem, usually visit to the chemist shop without a prescription and collect medicine with or without advice/precaution from over the counter. Present study design to focus on evaluating the role of Pharmacist/Chemist in management of acidity. Managing the acidity to some extent by prescribing drugs either in single or combined. Pharmacists to some extent helped in treating the acidity by dispensing the non OTC remedy. We found and concluded that most of chemists were not aware to steps to take in case of acute as well as in chronic case of acidity. KEY WORDS: Acidity, pharmacist/chemist, stomach disorder.</p>
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INTRODUCTION

Acidity refers to a set of symptoms caused by an imbalance between the acid secreting mechanism of the stomach and proximal intestine and the protective mechanisms that ensure their safety. The stomach normally secretes acid that is essential in the digestive process

Hatlebakk et al. (1999). This acid helps in breaking down the food during digestion. When there is excess production of acid by the gastric glands of the stomach, it results in the condition known as acidity. However, there are certain types of ulcers where acid secretion is either normal or even low Hatlebakk, J.G. (1997). Acidity is responsible for symptoms like dyspepsia, heartburn and the formation of ulcers (erosion of the lining of the stomach or

intestines). Acidity tends to have a much higher incidence in highly emotional and nervous individuals. It is also more common in the developed and industrialized nations, though a recent increase in incidence has also occurred in the developing countries. Consumption of Alcohol, highly spicy foodstuffs, non-vegetarian diets, and Non Steroidal Anti-Inflammatory Drugs (NSAID's) also predispose to gastric acidity. The stomach, intestines, and digestive glands secrete hydrochloric acid and various enzymes, including pepsin that break down and digest food. The acid may enter the lower part of the Esophagus (Gastro-Esophageal Reflux), due to some weakness in the normal sphincter mechanism that prevents such reflux. This causes heartburn. It commonly occurs after meals and is brought on by excess intra-abdominal pressure like lifting weights or straining www.wikipedia.com. Ulcers also occur as a result of over secretion of acid. This may happen when there is an imbalance between the digestive juices used by the stomach to break down food and the various factors that protect the lining of the stomach and duodenum (the part of the small intestine that adjoins the stomach) Huber et al (1995). A peptic ulcer is a raw area in the lining of the upper part of the small intestine (duodenal ulcer) or the stomach (gastric ulcer), whose protective mucosal lining has been eroded away by the gastric juices. Duodenal ulcers are three times more common than gastric ulcers. Hydrochloric acid, secreted in the stomach, is one of the factors in the development of ulcers, but is not solely responsible. Acid production in patients with duodenal ulcers tends to be higher than normal, while in those with stomach or gastric ulcers, it is usually normal or lower⁶. Excessively large amounts of acid secretion occur in certain situations, such as in a condition known as Zollinger-Ellison Syndrome, in which large amounts of secretion are stimulated by tumors located in the pancreas or duodenum Armstrong et al (1984).

The clinical symptoms and history are very important aspects of diagnosis. Any present and past drug use, especially chronic use of NSAIDs, a history of family members with ulcers, alcohol consumption and smoking, stress assessment and analysis are very useful in determining the cause of the condition. A trial with acid-blocking medication is given with a four-week course of acid-suppressing drugs. In such cases, the symptoms may subside. If symptoms persist, then further testing is needed. Upper Gastrointestinal Endoscopy is done to detect the presence of ulcers. If Zollinger-Ellison Syndrome is suspected, blood levels of gastrin should be measured Rang et al (2007). Barium Meal studies are also useful as these may show inflammation, active ulcer craters, or deformities and scarring due to ulcers. If an ulcer is present, a precautionary biopsy of the ulcer is usually taken to rule out malignancy as it is not uncommon for a malignancy to manifest as an ulcer⁸. Identifying and avoiding the causative factors are essential in the treatment of acidity. A suitable diet must be strictly followed to avoid spicy, salty and acidic foods. Antacids are the simplest of all the therapies for treating the symptoms of excessive gastric acid secretion. Smoking and alcohol consumption must be stopped. Those with highly nervous and emotional disposition and those involved in high-stress jobs must be encouraged to take lifestyle modifying measures. Antacids provide immediate relief of symptoms by neutralizing the excess acid secreted. A group of drugs called H₂ Receptor Blockers cause the stomach to produce less acid by blocking histamine receptors (example: Drugs like Cimetidine , Ranitidine, Famotidine or Nizatidine). Another group of drugs called the Proton Pump Inhibitors, which selectively disable a mechanism in acid-making cells thus stopping acid production are more powerful and include Omeprazole and Lansoprazole Katzung et al (2000). If ulcers have developed, they must be diagnosed rapidly and treated to

prevent complications like perforations. Long term therapy lasting for weeks may be required to produce complete healing. Surgical methods of reducing the acid secretion like vagotomy are being used with decreasing frequency Tripathi et al (2004). Prevention mainly consists of avoiding the known causative factors like alcohol consumption, spicy foods, drugs like NSAID's, steroids etc. Avoiding non-vegetarian diets is also useful in minimizing symptoms of acidity. A stomach ache usually refers to cramps or a dull ache in the belly (abdomen). Severe abdominal pain is a greater cause for concern. If it starts suddenly and unexpectedly, it should be regarded as a medical emergency, especially if the pain is concentrated in a particular area. Call your physician as soon as possible or go to your nearest hospital accident and emergency department if this is the case Johnsson et al (1992). Commonly a large number of patients having acidity and related problem, usually visit to the chemist shop directly without prescription and collect medicine with or without advice/precaution from over the counter. Present study design to focus on evaluating the role of Pharmacist/Chemist in management of acidity by dispensing drugs either in single or combined.

MATERIALS AND METHODS

The study was conducted randomly by buying the drugs for patients. The survey form designed and questionnaires were comprised, open/closed and yes/no questions were asked randomly from selected 90 pharmacists /chemist. The study was conducted among the pharmacists in Moradabad who cooperated well during this study. The study was conducted in the following step. Step-1 to buy the drugs from 90 pharmacists for acidity without prescription. Step-2 the questionnaire was prepared and asked from the pharmacists whether pharmacist dispensed the drugs.

Whether the patients was referred to the physician. heather they can ask about the severity/history of the disease. Step-3 the drugs were categorized and the results were assessed and interpreted. After collecting the data the necessary interpretation was done and the outcome of the study was assessed.

RESULT

90 numbers of pharmacists were randomly involved in the survey.

Table.1 Showing No. of the pharmacists dispensed drugs or suggested to physician for consultation

S. N.	Pharmacists	Pharmacists prescribed drug		Pharmacists suggests to physician consultation	
		N o.	Percent age (%)	N o.	Percent age (%)
1	90	86	95.5%	4	4.5%

Among the 90 pharmacist 95.5% dispensed drugs without prescription and 4.5% pharmacists suggested to consult with physician (Table-1).

Table.2 Pharmacists treated the patients with OTC drugs or without OTC drugs

S. N	Pharmacists given	No. of Pharmacist	Percentage (%)
1	OTC drugs	2	2.2%
2	Non OTC drugs	85	94.4%
3	Advise/Precaution only	3	3.3%

Table 2 revealed that most of the pharmacists dispensed Non OTC drugs (94.4%) & 2 pharmacists were dispensed OTC drugs (2.2%) and given advice/precaution (3.3%).

Table.3 showing the pattern of combination of drugs dispensed

S.N	Combination	No. of Pharmacist	Percentage (%)
1	Single drug	90	100%
2	Two drug combination	0	0%

3	Three drug combination	0	0%
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In table 3 illustrated the most common used combination drugs by the Pharmacists is single drug (100%).

Table.4 showed the most frequently prescribed drugs

S. No	Drugs Brand	No. of Pharmacists	Percentage (%)
1	Aciloc	50	55.5%
2	Gelucil	24	26.6%
3	Cyclopam	11	21.2%
4	Pudinhara	15	16.6%

Table 4 revealed that Pharmacists most commonly used Aciloc (55.5%) followed by Gelucil (26.6%), Pudinhara (16.6%) and then Cyclopam (21.2) for treating the acidity without prescription.

DISCUSSION

90 pharmacists were included in this study and it was observed that 95.5% of them dispensed drugs and 4.5% suggested consulting with a physician. Severe abdominal pain is a greater cause for concern. If it starts suddenly and unexpectedly, it should be regarded as a medical emergency, especially if the pain is concentrated in a particular area. Consult your physician as soon as possible Johnsson et al (1992). It was also observed that most of the pharmacists dispensed non OTC drugs (94.4%) followed by OTC drugs (2.2%) and 3.3% was given advice/precaution only. Prevention mainly consists of avoiding the causative factors like alcohol consumption, spicy foods, drugs like NSAID's, steroids etc. A suitable diet must be strictly followed to avoid spicy, salty and acidic foods. Avoiding non-vegetarian diets are also useful in minimizing symptoms of acidity Patients with highly nervous and emotional disposition and those

involved in high-stress jobs must be given psychological treatment Johnsson et al (1992). Pharmacists frequently dispensed the single drugs as compared combination therapy. Generally dispensed single drug was Aciloc (55.5%) is an H₂ Receptor Blockers cause the stomach to produce less acid by blocking histamine receptors followed by Gelucil (26.6%) is an antacid provide immediate relief of symptoms by neutralizing the excess acid secreted in the treatment of acidity Katzung et al. (2000). Therefore, pharmacists to some extent play an important role in case of acidity as in developing countries most of the people are underprivileged and were not able to afford high consultant fee of Physicians. Thus, most of the patients used to take drugs from over the counter.

CONCLUSION

Pharmacists to some extent helped in treating the acidity by dispensing the non OTC remedy. We found and concluded that most of chemists were not aware to steps to take in case of acute as well as in chronic case of acidity.

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