Introduction
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Herbal medicines, as the major remedy in traditional medical system, have been used in medical practice for thousands of years and have made great contribution to maintain human health (Anonymous, 1993). These medicines have been used as traditional treatment for numerous human diseases in many parts of world and in rural area of developing countries they still continue to be used as the primary source of medicines for health care (Chitme et al., 2003; Kim, 2005). It is estimated that 25,000 to 75,000 plant species are used for traditional medicines to treat human diseases. A great part of the modern pharmaceutical industries have been developed on the basis of medicinal plants discovered with the aid of ethno-botanical knowledge of traditional uses of plants by indigenous peoples and local communities (Aguilar, 2001; Kartal, 2007). Modern Pharmacopeias contains at least 25% of drugs derived from plants and many others, which are synthetic analogues, built on prototype compounds isolated from plants (Farnsworth et al., 1985; Astin, 1998).

The natural products derived from medicinal plants used in traditional medical system have proven to be an abundant source of novel biological active compounds, many of which have been basis for the development of new lead chemicals for Pharmaceuticals for new drug discovery (Palombo, 2006). Knowledge about the healing property of plants and formulations used in Ayurvedic therapeutics and mentioned in classical literatures are a result of astute clinical observations made over centuries. Details about the medicinal plants, their properties and therapeutic applications are available in ancient scriptures like Vedas, Samhitas and Puranas. Compilations of later periods that are called Nighantus are also the richest sources for herbal drugs information.

Ayurveda- "The Science of life" is one of the great gifts of sages of ancient India to mankind. It is one of the oldest scientific traditional medical system and considered as most sacred par excellent system and honored by those proficient in the Vedas (Sharma and Das, 1997). The edifice of the drug science of Ayurveda stands on a strong foundation of the basic fundamentals of panca-mahabhutas and tridosas. The three dosas, namely vata, pitta and kapha are biological representatives for
physiological functions in the state of homeostasis and for pathological disorders in the state of imbalance (Karnick, 1996). Vata translates into wind, corresponds to mind and nervous system, Pitta translates into fire or bile and is responsible for all metabolic transformation including digestion and assimilation of food and Kapha translates to water and mucous for anabolic functions such as development of muscles and bone tissues (Jagetia et al., 2002). The vitiation of Pitta dosa lead to impairment of Agni resulted in Amlapitta (hyperacidity), Grahani roga (malabsorption syndrome) and other gastro-intestinal disorders (Sastri and Sastri, 1973). The composition and properties of drugs desired on the basis of Mahabhutas and actions of drugs described on the basis of Tridosa, enables simple medicinal plant with marvelous therapeutic effects (Karnick, 1996).

Hurry, worry (stress) and curry (food) are the cause of many disorders in today's world of globalization. Of these gastro-intestinal disorders such as hyperacidity, gastric ulcer, intestinal damage and inflammatory bowel diseases including ulcerative colitis and Crohn's disease have assumed a distinctly high proportion (Jain et al., 2007).

The pathophysiology of acid gastric diseases is attributed to the imbalance between aggressive factors (like acid, pepsin and Helicobacter pylori infection) and local mucosal defense (like secretion of bicarbonate, mucus and prostaglandin) (Jain et al., 2007). There is evidence concerning the participation of Reactive Oxygen Species (ROS) in the etiology and pathophysiology of digestive system disorders such as gastro-intestinal tract inflammation and gastric ulcer (Repetto and Llesuy, 2002). Studies showing alteration in the antioxidant status following ulceration indicate the free radicals are directly implicated in the mechanism of acute and chronic gastro-duodenal ulcers (Yang et al., 1991) such as pylorus ligation induced (Rastogi et al., 1998) and stress induced (Cochrone et al., 1982) ulceration in rats. The modern approach to control gastric ulcer is mainly to inhibit gastric acid secretion by histamine-H\textsubscript{2} receptor blocker (ranitidine, famotidine etc.) and proton pump inhibitor (omeprazole, lansoprazole etc.) or to eradicate Helicobacter pylori infection by antibiotic (Metronidazole, amoxicillin, clarithromycine etc.).
Ulcerative colitis and crohn’s diseases are classified under Inflammatory Bowel Diseases (IBD). It is common and chronic gastro-intestinal disorders characterized by intestinal inflammation and mucosal tissue damage (Jurjus et al., 2004). It is multi-factorial intestinal disorders with unknown etiology but it is thought to involve a complex interplay among genetic, environmental, microbial and immune factors as causes for IBD. Inflammatory mediators such as cytokines, platelet activating factors, eicosanoid and reactive oxygen metabolites play crucial role in the development and persistence of the disease. The generation of phagocytes is essential for an effective host defense; its continuous overproduction during inflammatory process may cause extensive tissue destruction. One of the major fundamentals of tissue destructive mechanism is oxidative stress through an excessive release of reactive oxygen metabolites, which is an important component in the pathophysiology of inflammatory bowel diseases. In fact, antioxidant therapy has shown beneficial effect in several experimental model of rat colitis including acetic acid-induced colitis, which is one of the widely used animal models for IBD (Guo et al., 1999; Galvez et al., 2006).

Considering the several side effects of modern medicines, herbal medicines are nontoxic or possessing few side effects should be looked for better alternative for the treatment of gastro-intestinal disorders (Akhtar et al., 1992). In traditional system of medicines several plants and herbs are used to treat GI tract disorders including gastric ulcers (Satyavati et al., 1987). The first systematically effective drug against gastric ulcer was carbenoxolone from commonly used indigenous plant Glycerrhiza glabra. Gefarnate from cabbage also has been found to inhibit peptic ulcer by enhancing mucosal gastric strength. The scientific studies conducted on 231 medicinal species for anti-ulcerogenic effect has been compiled by Yesilada and Gurbuz (2003). Aged garlic extract protect the small intestine of rats from methotrexate injury (Horie et al., 1999) and soy products reverse the methotrexate toxicity in rats (Funk and Baker, 1991). Ginkgo biloba attenuated mucosal damage in rat model of acetic acid induced ulcerative colitis (Mustafa et al., 2006). Oleoresin from Copaifera langsdorffii showed cytoprotective effect in acetic acid induced colitis through antioxidant and antiperoxidative mechanism (Paiva et al., 2004).
Thus, herbal drugs offer an alternative to the synthetic compounds and have been considered either non-toxic or less toxic. The mechanism of action of herbal drugs differs in many respects from the synthetic drugs or single chemical drug (Wagner, 1999). In Ayurvedic medical practice, generally medicinal plants are used in compound form (Anonymous, 1992) and usefulness of drugs to the body systems can be conclusively proved only if drugs administered in its natural state or in which its therapeutic action has been described in the ancient literature (Vaidya, 1968). The herbal drugs characterized for polyvalent actions and interpreted as additives or in some cases they synergistically produce the observed therapeutic effect and such type drugs with multiple mechanism of protective action, including antioxidant properties may be one way forward in minimizing tissue injury in human diseases (Barry, 1991; Palombo, 2006).

The Triphala churna is popular traditional Ayurvedic herbal compound formulation, consisting of fine powder prepared by mixing equal proportion of dried pericarp of Haritaki (*Terminalia chebula* Retz.), Bibhitaka (*Terminalia belerica* (Gaertn) Roxb.) and Amalaki (*Emblica officinalis* Gaertn) fruits (Anonymous, 2003). However, there are no clear cut guidelines with regards to the proportion of the three ingredients. Some use equal proportions and some authors prepare Triphala by mixing one parts of Haritaki, two parts of Bibhitaka and four parts of Amalaki (Sarma and Tripathi, 1966; Vaidya, 1968).

Triphala is the one of the magic remedy of Ayurveda with multiple mechanisms of protective actions. According to ancient text, Triphala categorized as Tridoshik rasayana and antioxidant rich herbal formulation (Vaidya, 1968; Jeena and Kuttan, 1995; Sharma and Das, 1996; Jagetia et al., 2002) having balancing and rejuvenating effects on three constitutional elements that govern human life i.e. vata, pitta and kapha. Rasayanas are nontoxic Ayurvedic complex herbal formulations or individual herbs used to rejuvenate or attain the complete potential of an individual in order to prevent diseases and degenerative changes that leads to diseases and promote longetivity by providing strength and immunity (Sharma, 1994; Vayalil et al., 2002).
Triphala is traditionally been used as laxative in chronic constipation, colon cleansing, digestion problems and poor food assimilation. It also been used in cardiovascular diseases, all diseases of eyes, diabetes, poor liver function, large intestine inflammation and ulcerative colitis (Anonymous, 1952; Murthy, 1998; Mukherjee et al., 2006). Clinical report showed Triphala powder has been effective as laxative and used in management of hyperacidity and other gastric problems (Mukherjee et al., 2006).

Continued examination of traditional plant medicines is required not only to establish quality control but also enables to strengthen research in evaluation of efficacy of herbal medicines. Modern scientific evaluations of herbal drugs is mainly of concern with validating the traditional uses of herbal medicines and unexplored wonders and phenomena which lay in the depth of traditional systems are to be studied and integrated with exiting system. Further, Ayurvedic pharmaceutics is quite extensive. The concept of formulation is not receiving sufficient consideration while formulating Ayurvedic drugs. Experimental studies carried out have shown that formulation can have marked influence on the expression of biological activity. Further it is possible to refine the art of formulation, through experimental studies. Therefore in light of above discussion, we have evaluated Triphala formulations for their gastro-intestinal cytoprotective effects.