

The Top 25 Middle Eastern Drugs and Comparable U.S. Products to Acquaint Middle Eastern Immigrants with U.S. Medicine

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Abstract

Within the years 2010-2013, the revolutionary movement, known as the ArabSprings has caused many Middle Easterners to immigrate to the U.S. Due to the increase in Middle Eastern immigrants within the U.S. this research project aims to find the top 25 utilized Middle Eastern Drugs, and to find their comparable products within U.S. pharmacies. These 25 Middle Eastern medications were discovered using articles, Middle Eastern drug indices, and via interviews. The medications were compared to one another based on their basic mechanism of action. These findings indicated that more than 80% of the top 25 Middle Eastern drugs are comparable to the medications found in the U.S. As a result the project will aid incoming Middle Easterners who are in dire need of guidance for finding medications in the U.S, and also it will direct U.S. medical practitioners to the plight of Middle Eastern patients.

Introduction

Within the past three years, the Middle East region has become a victim to constant turmoil due to political, social and economical issues. The five Middle Eastern countries that will be focused on are, Syria, Jordan, Lebanon, Egypt and Turkey. Currently, these countries have become victim to the revolutionary movement, known as the Arab Springs. This revolutionary movement has led to massive protests, which have led these countries to be encompassed by riots, violence and some even with civil wars. Due to these unfortunate circumstances, many of the inhabitants within these nations are leaving their homeland and immigrating to the United States, in order to flee from danger and create a better future for their families. According to Breitbart, the news website, states, "Middle Eastern and North African refugees are streaming into European Union countries fleeing widespread unrest, and many may soon try to come to America. They know about America's policy of open borders, and millions will likely flood into America" (Street, Flood of Middle Eastern Refugees head to the U.S.). This evidently is true, which is displayed through the U.S. De-

partment of Homeland Security's 2012 Immigration Statistics. Within their statistical data table of "Persons Obtaining Legal Permanent Resident Status by Region and Country of Birth", it is calculated that from 2010-2012, there has been an influx of 25,744 (Egyptian), 9,661 (Lebanese), 8,354 (Syrian), 13,048 (Turkish), 11,843 (Jordan) immigrants into the United States of America. Totalling an influx of, 68,650, new Middle Eastern immigrants in the U.S from 2010-2012. Clearly, this population of Middle Easterners has a great tendency to keep increasing due to the ongoing unrest that is occurring within these nations. In regards to this issue, Breitbart news states, "When the Office of the United Nations High Commissioner for Refugees (UNHCR) was established in 1951, there were approximately 1.5 million refugees internationally. But last year the refugee population grew by 22% to 11.3 million. This rising tide is on track to swell to 14 million this year" (Street). In regards to the increase of Middle Easterners within America, many of these immigrants are faced with the difficulty in finding U.S. medications that are comparable to their Middle Eastern drugs. Thus, our present study will aid these incoming Middle Easterners by

pinpointing the top 25 utilized Middle Eastern drugs, and finding their comparable products within U.S. pharmacies. Taking into account the relationship between the basic mechanisms of action of the drugs, our study aims to present that more than 80% of the top 25 Middle Eastern drugs are comparable to the medications found in the U.S.

Methods

The first step for the research project required finding the top 25 commonly utilized drugs within the Middle East. In order to discover these common Middle Eastern medications, interviews were conducted. The total sample of the interview consisted of 30 Middle Easterners. This sample was then divided into two groups, one group (Group A) consisted of Middle Easterners (both males and females) who have arrived in the U.S. within the past 4 years, and the other (Group B) consisted of 15 Middle Easterners (both males and females) who have resided in the U.S. for more than 4 years. The interviews were conducted within 3-weeks via a survey questionnaire. The interviewees filled out the questionnaire. At the end of this process, all the interviews were gathered, and the data was analyzed. The interviews assessed 3 primary components, which are 1. The common medications that the Middle Eastern immigrants received within the Middle East (both synthetics and natural products) 2. The medical difficulties they faced when they arrived in the U.S., and 3. The difference of the medical system between the U.S. and the Middle East. In addition, to verify the names of the synthetic medications, two Middle Eastern drug indices were utilized, which were the Middle East Medical Index and the Lebanon National Drug Index. In regards to the natural products that were named by the interviewees, these were verified via the Saudi Aramco World literature, which focuses on the culture/history of the Arab and Muslim world. The article that was utilized was called, "Natural Remedies of Arabia", which named all the traditional natural products within the Middle East. After verifications of the collected data, the top 25 Middle Eastern medications were listed and the process began to find U.S. medications that were comparable to the Middle Eastern drugs. These U.S. products were identified, by utilizing WEBMD, an American Health Information Service, which provides a U.S. drug index. The medications were separated into two groups "comparable" and "noncomparable". Products that were identified as "comparable" had similar basic effects on

the given ailment. Products that were identified as "non-comparable" did not have similar effects. After comparing the medications, the drugs were placed into their set groups, and the percent of comparable Middle Eastern drugs was calculated.

Discussion

From our results, it was evident that more than 80% of the top Middle Eastern drugs were comparable to the medications found in the U.S. Evidently more than 20 of the drugs were

comparable to the medications found within U.S. pharmacies. These drugs were similar to one another due to similar basic mechanisms of action. Our data supports the hypothesis, thus displaying the aid that the project will provide for Middle Eastern Immigrants in finding medications in the U.S. In addition this will allow many U.S. pharmacists to provide the necessary and appropriate drugs for these immigrants. From the research interviews, we were able to assess that many of these Middle Easterners viewed the pharmacist as the primary healthcare provider within their native land. As they came to the U.S., many of these Middle Eastern immigrants faced difficulties in understanding the need of doctor prescriptions for most medications. The concept of visiting a primary physician to obtain a prescription in order to acquire drugs from the pharmacy was incomprehensible for many of these immigrants. The reason behind this is

that the immigrants within their homeland would only see a physician for severe illnesses, but for all other ailments the pharmacist provided the medications without any prior prescription. But the primary issue that was common for all the interviewed Middle Easterners was, not being able to find their drugs within U.S. pharmacies. The difficulty

for the immigrants in finding medications was caused by these three factors. First, the drugs were named differently than the drugs within the U.S. Many of the synthetic drugs that are found in the Middle East are distributed by European pharmaceuticals, thus leading the drugs to have different names. For example, Panadol is a Middle Eastern drug that contains acetaminophen, and provides its analgesic and antipyretic effect. In U.S. pharmacies, Panadol is not available. Instead, a product known as, Tylenol, is provided, which also contains acetaminophen and has similar effects. Unfortunately, many Middle Easterners are not informed that Tylenol is comparable to Panadol. Second, many Middle Easterners still utilize natural medicines to treat their ailments. This is due to their cultural upbringing. Many of these immigrants have obtained these natural healing remedies from their grandparents, thus causing the passing down of these unique treatments. Unfortunately, in U.S. pharmacies, herbal medicine is not readily available, resulting in Middle Easterners being unable to find their natural medicine. Third, many Middle Easterners lacked guidance in finding the correct drugs within U.S. pharmacies. Instead, they relied primarily on family friends to find their drugs. Thus due to these three, it was evident that Middle Easterners were not making use of the available services provided by U.S. pharmacies. Interestingly, out of the 30 interviews that were conducted, 21 Middle Easterners believed that a list of the top 25 Middle Eastern drugs with comparable U.S. products would be helpful in finding their desired medication. Although, all the drugs were not similar, with more than 80% of the top 25 Middle

Eastern drugs being comparable, it is clear that this project would be an aid for these immigrants.

Conclusion

It is evident that more than 80% of the top Middle Eastern drugs were comparable to U.S. medications due to similar basic mechanisms of action. Through the interviews, it was clear the Middle Easterners primary problem was not finding their desired drugs within the U.S. This was due to the three factors, which were, the different drug names, the lack of herbal medicine in U.S. pharmacies, and unfortunately, the lack of guidance to find a similar drug. By providing a list of the comparable

drugs to the top 25 Middle Eastern medicines, this will help Middle Eastern immigrants to become more knowledgeable in both addressing their problems to U.S. pharmacists, and knowing what to expect from the pharmacists in the U.S. In order to continue to effectively aid the incoming Middle Eastern population, the list of comparable drugs should be larger and more accessible. Further research in these components, will ensure that Middle Easterners are given the high quality care that is provided in the U.S.

Non-comparable

Middle-East	U.S.
1. Thyme: Thyme's antispasmodic effect, are found within its oils, which contain phenols thymol and carvacol. These components of Thyme reduce the severity of the coughing fits associated with Pertussis, thus it is utilized for this reason.	Azithromycin(Zithromax), Erythromycin and Clarithromycin (Biaxin): In the U.S. cough suppressants are discouraged in treating Pertussis. The medical professionals instead provide an antibiotic such as azithromycin in order to stop the growth of the bacteria, <i>Bordetella pertussis</i> .
2. Mercurochrome: Mercurochrome in the Middle East is a drug that contains the active component "mercury", which is used as an antiseptic. In the Middle East this drug is widely used cause of its low cost.	Humco Mercuroclear: Mercury is not used as an antiseptic due to its potential of being poisonous to the human body. Thus a readily available product that is utilized instead is called, Humco Mercuroclear. It is composed of Benzalkonium chloride 0.13% and Lidocaine hydrochloride 2.5%. The chemical component Benzalkonium chloride 0.13% provides the antiseptic properties of Humco Mercuroclear. The chemical component Lidocaine hydrochloride 2.5% provides the external analgesic effect of the drug.
3. Diantal Vic: Diantal Vic is a drug (within the opioid category) that is utilized in the Middle East for its local anesthetic and antitussive effects. Its main chemical component is Dextropropoxyphene.	Codeine: In the U.S, a product known as, Codeine, is available, which provides a slightly different effect. It is similarly utilized as an antitussive, but instead it varies by providing an analgesic effect. An analgesic is a drug that provides pain relief without the loss of sensation, while an anesthetic is a drug that provides pain relief with the loss of sensation.
4. Mebo: Mebo is a Middle Eastern Drug that is utilized as a topical ointment for damaged skin and mucous membranes that are caused by burns and acute/chronic skin ulcers. Mebo's basic effect provides: optimum moisture necessary for regeneration/repair, protection against infection, relief of pain, reduction of inflammation/ edema, and debridement/autolysis of necrotic tissue.	Collagenase Santyl: In U.S pharmacies Collagenase Santyl is utilized for healing chronic dermal ulcers and severely burned areas. But its effect is different because it solely promotes the debriding of necrotic tissue via the enzyme collagenase. The enzyme collagenase helps break up and remove dead skin tissue, thus allowing the dermal area to heal. Its course of action is evidently different from Mebo.

Comparable:

Middle East	U.S.
Alum: It is specifically a crystallized potassium alum that is configured into a powdered form and applied to the underarms in order to reduce perspiration. Within the Middle East, potassium alum is also utilized to stop bleedings and heal wounds due to its astringent/styptic and antiseptic properties.	Deodorant/ Styptic Pencils: A substance that is comparable in the United States is deodorant, which is accessible within the pharmacy. Styptic Pencils are comparable products within U.S. pharmacies, which provide astringent/styptic and antiseptic properties. Interestingly Styptic pencils are composed of alum blocks, which contract the blood vessels and stop the bleeding.
Anise: These are grayish seeds composed of terpenoid anetholes, which give its distinctive taste of black licorice. a. Dyspepsia: In the Middle East, anise seeds are used to treat upset stomachs and indigestion (dyspepsia).	a. Dyspepsia (Calcium Carbonate): In the U.S. one can treat indigestion by taking calcium carbonate tablets. Similar to anise, calcium carbonate tablets relieve a patient from heartburn, acid indigestion and upset stomach. Some calcium carbonate brand name drugs are Tums®, Rolaids®, Titalac®.
b. Expectorant: It is known to treat coughs by acting as an expectorant, which in essence allows one to cough more productively in order to remove the mucous within the airways.	b. Expectorant (Guaifenesin): In the U.S. if one is looking for an expectorant, the drug Guaifenesin can be used. Just like anise seeds, the Guaifenesin thins the mucus in the air passages so as to cough up the mucous.

<p>c. Diuretic: It is known to also clean the urinary system by acting as a diuretic and increasing urine flow.</p> <p>d. Dysmenorrhea: It treats menstrual pain and cramping for women.</p> <p>e. Pediculosis: the oil from the anise seeds is used to treat head lice.</p>	<p>c. Diuretic (Triamterene) - In the U.S. if one is suffering from edema (excess fluid within the body cavities), the pharmacy supplies its patients with Triamterene ("water pill"). Similar to anise, the Triamterene acts as a diuretic by causing the kidneys to remove unneeded water and sodium from the body as urine.</p> <p>d. Dysmenorrhea (Fish oil): U.S. pharmacies provide fish oil capsules in order to treat menstrual pains/cramping. Fish oil has preventative measures towards painful periods, and it also contains small amounts of vitamin E, which furthers its preventative effect.</p> <p>e. Pediculosis (Pyrethrum extract): For lice infestation, U.S. pharmacies have Pyrethrum extract from the plant, Chrysanthemum cinerariifolium. This can be applied to the skin and for 12-24 hours it is effective in treating lice infestation.</p> <p>(Coconut oil): Another supplement that U.S. pharmacies sell are coconut oil, which currently through developing research has shown to be effective in treating head lice.</p>
<p>Arak: The Arak is a fibrous stick that is derived from the arak evergreen tree. The color/texture of the arak is a yellow color. In the Middle East, many people use this fibrous stick to clean/protect their teeth and gums due to its antiseptic properties. The Arak specifically contains triclosan, which is an effective antibacterial agent that provides protection for one's teeth and gums. Historically, it is said that the Prophet Muhammad used the Arak during fasting and prior to religious prayers because he believed in its oral hygiene effects.</p>	<p>Toothpaste: In regards to finding a similar product in the U.S., triclosan, the main antibacterial component in the Arak stick, is prominently found within toothpaste. Similarly, the triclosan within the toothpaste prevents and kills the layer of bacteria found on one's teeth, which is known as plaque. With daily brushing with toothpaste, it is certain that the antibacterial effects similar to the results of arak will be guaranteed.</p>
<p>Black seeds: These black seeds come from the plant known as, Nigella sativa. These seeds are known as "seeds of blessings". According to historical tradition, Prophet Muhammad characterized the black seed, as a "cure for every disease." Ibn Sina (a.k.a Avicenna), a renown Persian physician, within his book "Canon of Medicine", refers to the black seed's provision of energy for patients who suffered from fatigue.</p> <p>a. Diarrhea: In the Middle east Black seeds are used to treat diarrhea.</p> <p>b. Flatulence: Black seeds are used readily to reduce gas within the digestive tract.</p>	<p>a. Diarrhea (Lomotil): A comparable product in the U.S. that treats diarrhea is a Lomotil, which treats diarrhea by reducing bowel movements.</p> <p>b. Flatulence: (Simethicone Oral): A comparable product that U.S. pharmacies provide for flatulence, is simethicone oral, which helps break up gas bubbles within the gut.</p>

<p>c. Asthma: Black seeds treat asthma by taking a role as an antihistamine, specifically it prevents the contraction of the tracheal smooth muscle that is stimulated by a histamine.</p> <p>d. Hypertension: Black seeds are utilized to lower blood pressure.</p> <p>e. Hypercholesterolemia: Black seeds are utilized to lower cholesterol. The active chemical agent Beta-Sitosterol is found within the black seeds, which provides its reducing effect.</p> <p>f. Cancer: Black seeds are utilized in the Middle East to treat cancer. This is due to its chemical component of Thymoquinone. Thymoquinone is known to induce apoptosis by p53-dependent and p53-independent pathways of cancer cell lines.</p> <p>g. Rheumatoid Arthritis: In the Middle East, black seeds are used to reduce the inflammation associated with Rheumatoid Arthritis. Thymoquinone is the active chemical agent behind this effect.</p> <p>h. Immune system: Black seeds are shown to activate the immune system by causing T-lymphocytes to release interleukins, which cause the stimulation of the macrophages.</p>	<p>c. Asthma: Benadryl (diphenhydramine): Many U.S. pharmacies provide many antihistamine drugs, Benadryl (diphenhydramine), which similarly stop allergy symptoms caused by histamines. This antihistamine drugs can substitute black seeds and its respiratory effect.</p> <p>d. Hypertension: (Fish oil capsules): A comparable to the effect of black seeds, would be fish oil capsules. Fish oil capsules contain omega 3 fatty acids, which expand the blood vessels, thus reducing high blood pressure.</p> <p>e. Hypercholesterolemia: (Beta-Sitosterol tablets): A comparable product to black seeds in U.S. pharmacies are, Beta-Sitosterol tablets. These tablets reduce the total and LDL cholesterol levels. Interestingly, the chemical agent Beta-Sitosterol is found within the black seeds.</p> <p>f. Cancer: (Omega 6 fatty Acid; Gamma Linolenic Acid): A comparable products in the U.S are the Omega 6 fatty acids specifically (Gamma Linolenic Acid). According to the American Cancer Society, "In laboratory tests Gamma linolenic acid slowed the growth of several types of human cancer cells. It has also been shown to make certain anti-cancer drugs better at killing cancer cells in laboratory studies."</p> <p>g. Rheumatoid Arthritis: (Black Seed oil capsules): A similar product that is provided for Rheumatoid Arthritis in America is Black Seed oil capsules, which contain the chemical compound Thymoquinone.</p> <p>h. Immune system: (Black Seed oil capsules): A similar product that is provided in America are Black Seed oil capsules.</p>
<p>Asafetida: Asafetida is a dried latex gum-like substance derived from the underground Ferula plant roots. Asafetida is infamous for its pungent/strong smell in addition to its bitter taste. Due to its aroma and taste, it is nick named the " devils dung." Asafetida is primarily used as a digestive aid. The spice-like substance can be placed on food while eating. Asafetida is also known to treat respiratory problems such as asthma and whooping cough. Asafetida is also known for its antiepileptic effects.</p> <p>a. Dyspepsia: In the Middle East, Asafetida is placed on food to prevent indigestion.</p>	<p>a. Dyspepsia: (Calcium Carbonate Tablets): In the U.S. one can treat</p>

<p>b. Asthma: Asafetida has antispasmodic properties that provide treatment for asthma</p> <p>c. Pertussis: Asafetida resin is used to treat whooping cough in the Middle East, due to its bacteriostatic effect.</p> <p>d. Epilepsy: In Middle Eastern medicine, Asafetida is utilized for its antiepileptic effects. American substitutes for an antiepileptic drugs include Lamictal, which prevents and controls seizures by restoring the balance of natural substance within the brain. One proposed mechanism of action for Lamictal is that it inhibits voltage-sensitive sodium channels, thereby stabilizing neuronal membranes.</p>	<p>indigestion by taking calcium carbonate tablets. Similar to Asafetida, calcium carbonate tablets relieve a patient from heartburn, acid indigestion and upset stomach. Some calcium carbonate brand name drugs are Tums ®, Roloids ®, Titralac®.</p> <p>b. Asthma: (Montelukast): A similar product that can be found in the U.S would be Montelukast, which prevents bronchospasm a symptom of asthma.</p> <p>c. Pertussis: (Macrolide antibiotics such as erythromycin, azithromycin, and clarithromycin): Comparable American drugs that would treat this bacterial disease would be the macrolide antibiotics such as erythromycin, azithromycin, and clarithromycin. These provide their antibacterial effect by acting as bacteriostatic, which inhibit protein synthesis.</p> <p>d. Epilepsy: (Lamictal) American substitutes for an antiepileptic drugs include Lamictal, which prevents and controls seizures by restoring the balance of natural substance within the brain. One proposed mechanism of action for Lamictal is that it inhibits voltage-sensitive sodium channels, thereby stabilizing neuronal membranes.</p>
<p>Cardamom: Cardamom is a spice that is derived from the ginger family Zingiberaceae. This spice is renown in Middle Eastern tradition. It is constantly used in Middle Eastern foods, desserts and especially coffee. Cardamom is known for its medicinal effects due to its qualities as carminative and stimulant.</p> <p>a. Irritable bowel syndrome(IBS): Cardamom contains chemical constituents that treat the intestinal spasms associated with IBS and they increase the movement of food through the intestine.</p> <p>b. Stimulant: Stimulants are substances known as, “uppers” because they raise the levels of mental activity within an individual. Cardamom is known to fulfill a role as a stimulant. A great substitute to Cardamom would be Caffeine tablets (Sold under the brand name Vivarin), which are found to be effective stimulants. Similarly to Cardamom, they are utilized to keep the individual awake and alert.</p>	<p>a. Irritable bowel syndrome(IBS): (Dicyclomine oral tablets and Peppermint Capsules): Many people in America treat IBS by utilizing Dicyclomine oral tablets. Dicyclomine would be a suitable substitute to the Cardamom spice because it effectively reduces stomach and intestinal cramping. Another substitute to Cardamom would be Peppermint capsules. Peppermint capsules are noted to reduce the general symptoms of IBS such pain and bloating.</p> <p>b. Stimulant: (Caffeine tablets; Vivarin) Cardamom is known to fulfill a role as a stimulant. A great substitute to Cardamom would be Caffeine tablets (Sold under the brand name Vivarin), which are found to be effective stimulants. Similarly to Cardamom, they are utilized to keep the individual awake and alert.</p>
<p>Camomile: Camomile is a flowering plant that originates from</p>	

<p>the Asteraceae plant family. In the Middle East, many have traditional medicinal uses from this plant. In order to supply the Camomile's medicinal results, the flower heads are brewed into a tea so as to drink the supplements that it provides.</p> <p>a. Dyspepsia: In the Middle East, Camomile is utilized for settling upset stomachs and digestion.</p> <p>b. Nervine: Middle Eastern medicine utilizes Camomile for its nervine effect, which soothes and calms the nerves. The flavonoid compounds of Camomile may be responsible its anti-anxiety effects.</p>	<p>a. Dyspepsia (Calcium Carbonate Tablets) In the U.S. one can treat indigestion by taking calcium carbonate tablets. Similar to Camomile, calcium carbonate tablets relieve a patient from heartburn, acid indigestion and upset stomach. Some calcium carbonate brand name drugs are Tums ®, Alka-Mints ®, Calcid ®.</p> <p>b. Nervine: (Calms Forté) A comparable product would be OTC drug called Calms Forté, which is utilized for nervous tension and occasional sleeplessness. Interestingly, the drug contains Chamomilla HPUS 2X, which is the active ingredient that provides relief from nervous irritability.</p>
<p>Garlic: Garlic is a species in the onion genus, specifically Allium savitum. Middle Easterners utilize Garlic for medicinal purposes. The bulb of the garlic plant is composed of 4-20 cloves, which contain the active chemical agent called allicin. Most medicinal effects are due to this chemical compound, which is proven to treat the ailments mentioned before. According to Dr. Ellen Tattelman, "Sulfur compounds, including allicin, appear to be the active components in the root bulb of the garlic plant. Historically, garlic has been used around the world to treat many conditions."</p> <p>a. Atherosclerosis: Middle Eastern traditional medicine utilize garlic to treat heart disease such as atherosclerosis and high blood pressure.</p> <p>b. Bee Stings: In the Middle East, Garlic is used to treat bee stings, by reducing the swelling that is caused by the venom within the stinger. Garlic has anti-inflammatory agents, which are 1,2-vinyldithiin (1,2-DT) and thiacremonone.</p>	<p>a. Atherosclerosis: (Allicin tablets): is a condition in which an artery wall thickens due to cholesterol and triglycerides gathering up within the blood vessels. To treat this condition U.S pharmacies provide drugs such as Cholesterol medications, Anti-platelet medications, Beta blocker medications, ACE inhibitors, Calcium channel blockers, water pills (diuretics). But a product comparable to the effects of garlic would be an Allicin tablet, which are easily found at any U.S pharmacy.</p> <p>b. Bee Stings (Benadryl (diphenhydramine)) A comparable product to the effects of garlic would be Benadryl(diphenhydramine), which is an antihistamine that reduces swelling caused by histamines.</p>
<p>Pomegranate: Pomegranate is a fruit that comes from the fruit bearing plant known as Punic granatum. It is native to Iran, but it has been grown all throughout the Middle East region. Pomegranate has been used for thousands of years. It is found in Buddhist, Islamic, Hebrew, and Christian texts. Pomegranate is composed of chemical agents, which have antioxidant effects. Due to its antioxidant characteristic it is known to treat atherosclerosis. It is also known to have medicinal benefits in treating indigestion and sore throats.</p> <p>a. Atherosclerosis: Middle Easterners utilize pomegranate due to its antioxidant component, which they believe reduces atherosclerosis.</p>	<p>a. Atherosclerosis: (Omega 3-fatty acids; alpha-linolenic acid): A comparable product that can be found within the U.S to treat atherosclerosis are Omega 3-fatty acids specifically alpha-</p>

<p>b. Dyspepsia: Within the Middle East, Pomegranate juice is known to alleviate the symptoms of indigestion.</p> <p>c. Sore throats: Pomegranate is known to treat sore throat by being utilized as a gargle. Specifically the pomegranate peels are boiled, and then the liquid is drained into a cup so that it can be used to wash one's mouth/throat</p>	<p>linolenic acid. These Omega 3-fatty acid supplements are known to reduce the hardening of the blood vessels, which is caused by plaque.</p> <p>b. Dyspepsia: (Calcium carbonate): In the U.S. one can treat indigestion by taking calcium carbonate tablets. Similar to Pomegranate, calcium carbonate tablets relieve a patient from heartburn, acid indigestion and upset stomach. Some calcium carbonate brand name drugs are Tums ®, Alka-Mints ®, Calcid ®.</p> <p>c. Sore throats: (Sucrets): Currently in America, many treat their sore throat by making use of throat lozenges, such as Sucrets. This can be a substitute to pomegranate due to the similar beneficial medicinal effect.</p>
<p>Walnut Bark: Its origins are from the flowering tree known as the Juglans nigra. Traditional Middle Eastern medicine use the bark of this tree in order to strengthen the gums and treat gum disease. The bark is used by softening it and after it is rubbed against the teeth and gums.</p> <p>a. Gum Disease: Middle Eastern medicine utilizes Walnut bark to treat Gum Disease due to its astringent and cleansing effects.</p>	<p>a. Gum Disease: Toothpastes: A comparable product in the U.S. that treats gum disease would be toothpastes that contain triclosan, which have preventative effects against plaque buildup, which is associated with gum disease.</p>
<p>Olfen: is a drug that is found in the Middle East. This is a drug that is used in the Middle East as a non-steroidal anti-inflammatory drug. It is specifically used to relieve pain, swelling, and joint stiffness caused by arthritis. In the Middle East no prescription is required to obtain this drug.</p>	<p>Voltaren(diclofenac sodium): A comparable product that could be found in the U.S. would be the brand name drug called Voltaren or the generic name diclofenac sodium. Voltaren similarly is a NSAID drug that is used to treat the similar symptoms caused by arthritis. A prescription is required to obtain this drug, which can be manufactured as a both tablet or gel.</p>
<p>13. Primperan: is another drug that is renown in the Middle East. This is a drug that treats gastroparesis. This is a condition in which the stomach cannot empty itself resulting in nausea related symptoms. Primperan specifically works by speeding up stomach emptying and the movement of the upper intestines. By having this effect, it displays its anti-emetic qualities by diminishing nausea within the individual.</p>	<p>Reglan (Metoclopramide): Reglan are metoclopramide tablets that treat gastroparesis, and eliminates nausea that is associated with this condition. A prescription is required to obtain this drug within the U.S.</p>
<p>14. Emla: In the Middle East it is utilized topically as an anesthetic cream. It is used for vaccinations, blood tests, blood donations, piercings, minor skin procedures and aesthetic beauty procedures. Its effect is due to its two main components, lidocaine and prilocaine.</p>	<p>Emla (Lidocaine and Prilocaine Cream): In the U.S. the drug Emla could be found, but if some U.S. pharmacies do not have Emla, a similar product would be the generic drug Lidocaine and Prilocaine Cream, 2.5%/2.5%. This drug similarly is used topically on skins as a local anesthetic. It works by blocking nerves from transmitting painful impulses to the brain. A prescription is required to use these drugs within the U.S.</p>
<p>15. Quadriderm: Quadriderm is another drug that is commonly used in the Middle East. This drug is composed of betamethasone 17 - valerate, gentamicin sulfate, tolnaftate and clioquinol. Quadriderm provides anti-inflammatory, antibacterial, and antifungal effects. It is known to specifically treat eczema and other allergic and inflammatory skin disorders caused by bacteria or fungi (such as candidiasis).</p>	<p>Betamethasone Valerate, Clotrimazole-Betamethasone, Muiprocini: In the U.S., there isn't one drug that can provide the same effects as Quadriderm. Instead, there are corticosteroids such as betamethasone valerate cream, which simply treat skin inflammations. Another comparable product would be clotrimazole-betamethasone topical cream, which is specifically used to treat skin inflammations caused by fungus. U.S. pharmacies also provide Muiprocini, which is a</p>

	topical antibiotic cream, that treat skin infections caused by bacteria.
Oticol is a drug within the Middle East that is utilized for acute otitis media with tympanomastoiditis, traumatic ear infections, and otalgia. Oticol are administered as otic drops, and each otic drop is composed of Lidocaine, Phenazone (Antipyrine), Sulfanilamide, and excipient of Oticol. The Lidocaine and Phenazone (Antipyrine) provide the analgesic effect due to its anesthetic properties. Sulfanilamide chemical component provides a local bactericidal effect. The excipient of Oticol dissolves the secretions that are blocking the auditory canals.	Ciprodex otic : A comparable product that is found within the U.S. pharmacy is Ciprodex otic, which treats Acute Otitis Media with Tympanostomy Tubes. Ciprodex otic contains ciprofloxacin (a quinolone-type antibiotic) and dexamethasone (an anti-inflammatory corticosteroid). Although it contains different components, its similar to the Middle Eastern Drug "Oticol", due to the fact that both target ear infections caused by bacteria.
Lotriderm is a Middle Eastern drug that is utilized for fungal skin infections such as athletes foot, ring worm, candida skin infections. Lotriderm is a specific cream that contains two active ingredients, betamethasone dipropionate and clotrimazole. Betamethasone dipropionate is a corticosteroid, which mechanism of actions is to reduce inflammation. Clotrimazole is an antifungal agent, which kills fungi and yeasts by disrupting their composition of their cell membrane.	Lotrisone : A comparable product that a U.S. pharmacy can provide is "Lotrisone", which similarly to "Lotriderm" treats local fungal skin infections such as tinea pedis, tinea cruris, tinea corporis etc... Lotrisone contains the same active ingredients as the Middle Eastern Drug, "Lotriderm"; betamethasone dipropionate and clotrimazole.
Panadol is a Middle Eastern drug that is used to treat mild to moderate pain (from headaches, menstrual periods, toothaches, backaches, osteoarthritis, or cold/flu aches and pains) and to reduce fever. Panadol contains acetaminophen, which provides its analgesic effect and antipyretic effect.	Tylenol : is a comparable product that is sold within the U.S. because similarly to Panadol it contains acetaminophen, which provides similar effects.
Voveran is a drug that is used in the Middle East to treat pain or inflammation caused by arthritis or ankylosing spondylitis. Voveran has these medicinal effects due to its main chemical component of diclofenac, which is NSAIDs (non-steroidal anti-inflammatory drugs	Diclofenac (Brand names: Voltaren, Cataflam, Voltaren-XR, Cambia) : In the U.S. a comparable product would be the generic drug Diclofenac (the primary component of Voveran), which is also sold under the brand names Voltaren, Cataflam, Voltaren-XR, Cambia. These drugs similarly are NSAIDs, which are used to treat inflammation and pain caused by conditions such as rheumatoid arthritis, osteoarthritis and ankylosing spondylitis. The exact mechanism of actions of NSAIDs is the blockage of the enzyme that makes prostaglandins, chemicals that cause pain, fever and inflammation. Voveran could be administered via IM or tablets.
Buscopan is a Middle Eastern drug that acts as an anticholinergic and antimuscarinic agent. It is utilized for its antispasmodic effects, which is used to treat cramping abdominal pain associated with IBS. The principal chemical component is Hyoscine Butylbromide, which is derived from the plant genus Dubosia (found in Australia). Hyoscine Butylbromide is responsible for Buscopan's suppression of abdominal muscle spasms, thus leading to the reduction of pain.	Dicyclomine (Brand Name: Bentyl) : Dicyclomine acts as an anticholinergic agent that provides an antispasmodic effect. Dicyclomine is utilized to treat patients with functional bowel/irritable bowel syndrome, by relaxing the muscles in the stomach and intestines.
Domperidone (Brand name: Motilium) is a generic drug (that is utilized in the Middle East due to its antiemetic activity. Its mechanism of action consists of dopamine receptor blocking, which leads to the suppression of nausea and vomiting within patients.	Metoclopramide (Brand name: Reglan) : Metoclopramide is used to treat nausea and vomiting, and its chemical component Similarly to Domperidone, it provides its antiemetic properties by acting as a dopamine antagonist.
Fucidin is a Middle Eastern drug that is utilized as a topical antibiotic cream. It is composed of Fusidic acid, which is known to inhibit bacterial protein synthesis. Thus, without the proteins the bacteria are unable to grow, replicate and increase in number. The residual bacteria are taken care by the human immune system.	Muiprocin (Brand name: Bactroban) : On the other hand, a comparable product found in U.S. pharmacies is Muiprocin (Brand name: Bactroban). Similarly to Fucidin, Muiprocin at low concentrations is utilized as a topical antibiotic that prevents bacterial protein synthesis, thus acting as a bacteriostatic.