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1. ABSTRACT
Specific selection of some essential oils of aromatic plants will be more require for skin infection diseases according to the recent research studies on this field. Isolated pure essential oil compounds or blends of essential oils and their dosages and aromatic plant extract will be applied in the treatment of fungal infectious skin disease commonly present in India. Isolated pure essential oil compounds or blends of essential oils and their dosages and aromatic plant extract will be applied in the treatment of fungal infectious skin disease commonly present in India. Essential oil will be extracted from the aromatic plants after that screened specifically because the governing body of TI (Therapeutical Indices) advises that the compounds of various essential oil are not suitable to inhibited severe infections, but some selected and specific compounds of essential oil from higher plants give moderat effectiveness against gram-positive bacteria, fungi and yeast, but not gram-negative bacteria. The specific essential oils of selected aromatic plants will be tested for antimycotic activity and impersonate much potential as antifungal factors. This work will be investigated the activity of the blends of several essential oil and aromatic plant extract against various fungus of skin infection by minimum inhibitory concentration (MIC), minimum fungicidal concentration (MFC) and time-kill methods.
2. INTRODUCTION
Skin problems are very common among the populations in many rising countries. Currently many common fungal skin diseases are influenced by the insalubrious and poor hygienic conditions. Environmental components like high temperature and humidity also play a substantial role to transmission under tropical and subtropical conditions like India. Almost all the Indian population belonging to social economically low status and they did not worry about the seriousness of the skin problems like fungal skin infections. It is consider that after the consulting of health care specialists many of the people do not take proper medication of related health problems. This ignorance of medication about health increases to more critical complication especially in skin disease conditions. Mycids, Athlete’s foot are the most common fungal infection in the general population (Kovacs 1995), Tinea capitis, Tinea unguium, Tinea corporis, Pityriasis versicolor, Mycetoma and Candidiasis are the common skin fungal infections. Among these, ringworm infection, a superficial fungal infection, is most prevalent. Commonly, these infections are named after the affected body parts.
This is investigated and proved that superficial fungal infections can be spread easily through direct contact with infected people, brushes, toys, pets, animals, clothing and other objects. The fungi tend to grow in mostly moist parts of the body where the skin comes together such as toes, under breasts, between fingers, and in the genital area. Overweight people also have more places where skin comes together because of the fat increase so these types of people have more at risk of developing fungal skin infections.

Fungal infections in skin are in different forms and show up in specific parts of the body, some example are here:
- Foot fungal skin infections (tinea pedis, also known as athlete’s foot)
- Groin and buttocks fungal infection (tinea cruris)
- Beard area fungal skin infection (tinea barbae)
- Scalp fungal skin infections (tinea capitis, also called ringworm)

- Skin fungal infections (tinea corporis) for skin other than bearded areas, scalp, groin, hands or feet (Noble, 1998).
- Moist parts of the body (such as the penis, vagina, corners of the mouth, nails, skin folds, anus, mouth) fungal infections.

Synthetic antidermatophytics are widely used to treat skin infections in the several countries. These cultured antidermatophytics are mostly non biodegradable petro-products and non-renewable that
also causes harmful effects and residual toxicity (Roxburgh and Borrie, 1973). Thus, screening for new treatments of fungal infection with higher efficacy and cheaper substitutes are desirable. Plant resources as well as essential oils are the natural choices of whole world at present time. Naturally occurring antidermatophytes i.e. produced by specific essential oil extracted from the aromatic plants are mostly biodegradable (Beye, 1978) and devoid of side effects. Almost all the countries have great untapped resources of essential oils. The concentrated essences of various flowers, fruits, herbs, and plant have been used for countries all over the world but in modern time we have forgotten the power of the ancient medicines of the earth, preferring instead to use the products of medicine and chemical companies which imitate the natural medicinal and cleansing properties of essential oils. Many people suppose their value is essentially one of charm and fragrance but this is mistake, modern scientific research has proven that essential oils are potent which remarkable medicinal properties. The essential oils which extracted from the aromatic plants are effective source of therapeutic agents without unwanted side effects are also strong fungicides (Pandey et al., 1996; Shahi et al., 1996; Shahi et al., 1999; Shahi et al., 2000; Inouye et al., 2006). Rhizomes and essential oils have great importance in the prevention of fungal side effects (Jain et al., 2007). In the other recent investigation the main essential oil from the leaves of Curcuma longa L. and other essential oil from different aromatic plants was found effective against human pathogenic Epidermophyton floccosum (Hartz) Langeron and Milochevitch, Microsporum gypseum (Bodin) Guiart and Grigorakis, Microsporum nanum Fuentes, Trichophyton mentagrophyte (Robin) Blanchard, Trichophyton rubrum (Castellani) Sabouraud and Trichophyton violaceum Bodin causing tenia corporis.

The chemical composition of essential oils is mostly variable among different plants of same species and even between different parts of the plants. In addition, the composition of essential oil may also differ according to the collection areas, as their chemical components play a major role in the plant adjustment to the ecology and the environment of that area, including biotic and abiotic factors (Sarac N et al., 2009 and Ortega-Nieblas et al., 2011). Use of antibiotics in overabundance is the main issue of spreading resistant bacteria throughout the world (Nostro et al., 2004). Scientific literature revealed the antifungal, antioxidant and antimicrobial potentials of several specific essential oils (Ladeira et al., 2009 and Tyagi et al., 2010). In addition, the antiviral potential of essential oils has been well documented (Cermelli et al., 2008 and Schnitzler et al., 2001). Most of the essential oils of aromatic plants are the mixtures of 20–60 chemical components with concentrations. Some compounds at fairly high concentrations i.e. 20–70% and others in trace amounts. The components at high concentrations like terpenes and terpenoids play a major role in the antimicrobial and biological effect of EOs (Bakkali et al., 2008).

In the proposed study, the effect of various essentials oils and extract of the aromatic cum medicinal plants against different fungal Skin Diseases will be investigated on the human skin. For this following objectives have been decided:

- To select the specific aromatic cum medicinal plants for extracts.
- To extract the essential oils from specific aromatic plants.
- To screen of essential oils and plant extracts against various Skin disease.
- To study the activity of plant extract with essential oils and their components against various fungal skin disease.
- To standardize the dose of essential oils/ aroma chemicals against cell line of various skin disease.
- To use aroma chemicals/ essential oil as clinical trial against various skin disease.

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4. EXPERIMENTAL DESIGN

Methodology:

Search strategy:
The research will be started after the acceptance of my synopsis by research committee. PubMed will be used as the sole electronic database for searching the articles. The language will be limited to English and the years of this era. The articles will be examined either they met the inclusion criteria or not.

Inclusion criteria:
The studies included will be either in vivo or in vitro studies. Different species of fungus which infect the skin will be selected. Chemical characterization of essential oils will be investigated for the complete and better results. Essential oils and plant extract from the aromatic plants such as Ocimum basilicum (Basil), Cymbopogon (Lemongrass), Eucalyptus, Citronella, Tagetes (African marigold) will be used alone or in combination with different type of fungus. The studies will be based on experiments, all reviews or meta-analyses either with reference or genuine.

Some following points will be presented for step regulation of methodology of my research work.
• Select the specific aromatic plants for plant extracts.
• Select the specific aromatic plants for extraction of essential oils.
• Chemical characterization of essential oil and extract for further use in experiment.
• Collection of the different types of samples of skin infectious fungus.
• Identification at the level of staining and morphologically.
• Culture of samples in specific media.
• Specific selection and identification of essential oils.
• Checking of efficiency and biological activities of essential oils.
• Identification of specific essential oil which inhibits the fungal growth.
• Create a specific formulation in certain ratio.
• Formulations will be used in Clinical treatment as a clinical trial.

Preparations of the plant extracts:
The aromatic cum medicinal plant extracts will be prepared from dried powdered samples macerated separately in conical flasks with methanol over seven days at room temperature.
Following filtration, crude methanolic extracts will be dried under vacuum using a rotatory evaporator at 60°C. The extracts will be dissolved separately in 70% alcohol and subjected to liquid-liquid partitioning using hexane to obtain three products: a crude methanol extract, a hexane fraction and a defatted methanol. (Wayne, Pa2002).

Extraction of essential oil from aromatic cum medicinal plants:
Essential oils will be prepared from fresh various plant sources. Fresh material will be cut into small pieces and charged each part individually placed in a round-bottomed flask. The essential oil extraction will be done by hydro distillation using a Clevenger-type apparatus for 4 to 6 hours (Clevenger, 1928). The physiochemical properties of the oil will be determined by the technique described by (Langenau 1948).

Determination of antifungal activities of essential oils and ethanolic extracts of selected aromatic plants:
To determine which components present in extracts of the plants will be responsible for the antifungal activity of specific aromatic plants; methanol extracts will be fractionated using a separating funnel with hexane and ethyl acetate to produce four fractions: an exhausted methanol fraction, a hexane fraction, a crude methanol extract and an ethyl acetate fraction (Raaman N. 2006). The fraction in which the antifungal activity will be detected and that will be further characterized by Gas liquid Chromatography hybrid Mass spectrophotometry (GC-MS) analysis (Sandra et al.1987) and (Joulain et al. 1994). The essential oil and the extracts will be bio-assayed by the poisoned food technique (Nene and Thapliyal, 1979). Essential oil will be mixed with dimethyl sulfoxide (DMSO) so as to ease its incorporation into the agar medium in the proportion 1 volume of oil to 9 volumes of DMSO. The essential oil will be tested at 1000 ppm (that is μL/L). Organic extracts (diluted in DMSO) will be tested at 1500 ppm. The oil and extracts will be autoclaved and cooled (at 50 °C) SBA medium through 0.45 μm sterile Millipore filters. The medium amended with oil or extracts will be then poured into sterilized Petri dishes. A mycelial disc of 5 mm in diameter of the test pathogens taken from 10 day old culture and will be placed at the center of the medium with the help of a sterilized cork borer. Some plates will be prepared as controls without the oil or extracts but only DMSO. The plates will be sealed with parafilm and incubated at 28 ± 2 °C for 5–7 days, time period by which the growth of control would have reached the edges of the plates. Growth inhibition of each of the fungal strains will be calculated as the percentage of inhibition of radial growth relative to the control along with the antidermatophytic effect on fungal mycelium. The plates will be used in triplicates for each treatment.

The growth inhibition of treatment compared to control will be calculated by percentage, using the following formula:
Inhibition (%) = \((C-T)/C\) × 100
Where, C and T are the radial growth (mm) of dermatophytes in the control and treated plates, respectively.

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5. SCOPE AND LIMITATIONS OF EXPECTED OUTCOME
This investigation will be conducted to determine the status of the teaching and toughing research science in many research labs, research centres, and research hospitals. General purpose of this research is to determine the status and of fungal disease of skin in different types of persons of India.

The scope of the this research is new antifungal compounds obtained resulting significant source of new and more effective medicine which will not synthetic but it will be natural medicine obtained from aromatic cum medicinal plants and this research will be unique, revise, and few contributions of related recent successful research works in this area. That will make to area of knowledge. That’s why this research will be make improve or changed as a result of the other proposal research works. The potential and possible limitations of the expected results or outcome will be time taken to positive effect of the proposed study. The limitations approaches, procedure, methods i.e. sampling, place of trial, clinical trial etc will be sensitive and held by the administrative permissions of the relative areas.
6. UTILITIES

The utilities of present research work, antifungal activity and other biological activities of essential oil will be investigated which is obtained from aromatic cum medicinal plants. The final resulting essential oil will be natural which will not any side effect on the human body and also useful for other diseases. Thus, the present proposed research will be very useful for human body because the natural essential oil have great potential to kill pathogens. This result confirms the findings of actual essential oil which cure the fungal infections on skin. After this investigation the infected peoples will feel good for him health.

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