ABSTRACT

Dermatology is a field of medicine deals with the skin and additionally ailments of the hair, nails and mucous membrane. The skin is the biggest organ of the body, covering an approximate area or around 20 square feet in the normal adult. It is the principal line of defence against microbes and damage and frequently reflects the general health of the body. A review led by the Mayo Clinic, published in 2013, reported that 42.7% of patients went to their specialists sooner or later because of a skin issue. Disorders of the skin, hair, nails and mucous membrane are overseen through investigation and treatments that incorporate histopathology, immunotherapy, laser treatment, medicine, phototherapy, radiotherapy and surgery.

INTRODUCTION

The skin is an important physical, biochemical, and immunological hurdle against pathogenic affront and is made up of the upper epidermis and the lower dermis. The physical hindrance comprises essentially of the stratum corneum, which contains the waterproof protein keratin, and the biochemical boundary comprises of lipids, acids, hydrolytic catalysts, and antimicrobial peptides (AMPs). The immunological obstruction or the skin immune system is made up of humoral and cellular constituents of the immune system. The ordinary skin inflammatory reaction is a fast, self-constraining, defensive process that happens, under typical physiological conditions, as the first phase of wound healing or tissue injury. Dysregulation of any of the components required in the inflammatory reaction is critical in the development of the ailment, and inability to determine this reaction prompts to chronic inflammation and non-healing wounds, making an antagonistic microenvironment for tissue recovery.

In order to create awareness among the people, group of physicians and consultants unite to form a society or an organization. The main aim of these societies is to counsel and create awareness among the victims of skin disorders such as psoriasis, dermatitis, acne, etc. as well as healthy personnel. Major societies like American Dermato-epidemiologic Network aims to improve public awareness in Dermato-epidemiology, and the advancement of quality standards to enhance patient care. It also support and promote researches in the field of Dermatology research. International Psoriasis Foundation promotes the education and activities relating to the prevention and treatment of Psoriasis through the development of Psoriasis related knowledge and practice. European Society of Oncology Pharmacy of Czech Republic is associated with Omics thereby endorsing the scientific events conducted in the field of skin oncology. American Society of Human Genetics is another international society comprising of professional dermatologists and biotechnologist, contributes to the development of effective policy and techniques for betterment of Dermatology patients at the global level, particularly in the American countries. Bulgarian Society of Dermatology struggles for the diagnosis and treatment of psoriasis.
Open Access literature plays a key role in proving the information and current researches across the globe. *Journal of Clinical & Experimental Dermatology Research* provides information on latest therapeutics techniques such as Dermoscopy, Laser tattoo removal, Laser skin resurfacing, etc. and also many conferences like Vitiligo and Skincare Physicians Meeting where an abstract entitled Development of a non-invasive skin diagnostic test for guiding Vitiligo treatment was Pieter Spee of Estonia, illustrated about the development of new diagnostic technique for diagnosis & treatment of Vitiligo [28,30]. *Clinical Dermatology Research Journal* is an international peer-reviewed scholarly journal, which is committed to publish high quality articles across the globe on clinical and experimental studies in the field of dermatology and sub-specialty.

**Clinical Pediatric Dermatology** Journal literature enhances the knowledge and provides cutting-edge research approaches for the expansion of new therapeutics. *Dermatology Case Reports* is a leading provider of clinical material on dermatology and novel methods of treatment of various dermatologic diseases. The above mentioned Open access journals on dermatology are the peer-reviewed open access journals that uphold the eminence and standard of the journal content, reviewer’s agreement and respective editor’s acceptance in order to publish a paper. These journals confirms the hurdle-free delivery of its content through online open access and thus helps in improving the citations for authors and attaining good journal impact factors [36-64].

**COMMON SKIN DISORDERS ACROSS THE GLOBE**

The most common skin diseases include Dermatitis, Acne vulgaris, Psoriasis, Skin cancer, Vitiligo, Actinic Keratosis, etc. Of these diseases mentioned, Acne vulgaris is the most common skin problem in USA [54-68].

Acne is the most prevalent skin ailment in the US that affects almost every teen and the occurrence of acne is also developing in adults. Acne is caused by blocked hair follicles and oil glands of the skin and often activated by hormonal changes [69-80]. With the help of Open access healthcare literature offers information of novel clinical and experimental researches ongoing in the current era. Here are few articles which provide evidences that are capable enough for a person to attain knowledge on Acne [80-93]. An article entitled *Dermatological Effects of Different Keratolytic Agents* on Acne Vulgaris written by Essa Ajmi Alodeani of Saudi Arabia, explains the cutaneous response of various keratolytic agents in acne vulgaris management in 90 patients from October 2015 to February 2016. Both salicylic acid and jessner did not have any effects; however glycolic acid had moderate effects (30% showed excellent results and 40% showed good results). There were very few complications with all the keratolytic agents used [94-107]. *Vitiligo* is rare skin condition and affects one in hundred people in US. It is condition in which skin loss brown pigment from certain areas and is very tough to treat, although cosmetics can minimize the effects [83-91], *Yvon Gauthier*, Head of Pigmentary Disorders Outpatient Clinic, is holding expertise in Vitiligo and various other Pigmentary Disorders [108-122].

*Psoriasis* is a condition in which skin cells accumulate and form itchy and dry patches. It's characterized by 10 folds faster multiplication of skin cells than normal cells [116-130]. An article entitled *Psoriasis Management: Patient Feedback and Healthcare Limitations* authored by Aldeen T from UK provides literature regarding the management of Psoriasis by conducting postal feedback survey from 112 (males & Females) patients receiving psoriasis care in district hospital [119-120]. 13th International Conference on *Skin Infections*, Diseases and Annual Dermatologists Summit held Vancouver, Canada, from October 03-04, 2016 Prof. Madalene Heng from UCLA school of Medicine presented his opinions on pathologies and treatments of Acne and Rosacea [151-158].

In addition to articles, speaker presentation at conferences, workshops, symposiums also produce a healthier exposure to health and medical information and advanced technologies invented in the present era [159-173]. In 11th Global *Dermatologists Congress* held in Dubai, UAE from November 14-15, 2016, Dr. Regina Fölster-Holst from University Medical Center Schleswig-Holstein, Germany presented her views on new insights in barrier structure in atopic dermatitis and exanthemas in children [174-179]. International Conference on *Psoriasis and Skin Specialists Meeting* held in Dallas, Texas, USA from December 08-09, 2016 explicate the diseases from various scientific aspects. Dr. Andrej Petrov conducted a workshop on “Psoriasis: From Diagnosis to Treatment” explaining different techniques to diagnose and treat the psoriasis.
NOVEL APPROACHES IN DERMATOLOGY

As the common skin problems have become more widespread, there are many scientists who are trained especially in diagnosing, treating and counseling the prevention of Skin Diseases and Infections and are well known as Dermatologists. Approximately there are 13,773 Dermatologists and 1,288 Dermatopathologists in USA [180-185]. For diagnosing different skin condition, dermatologists invent various diagnosing techniques [146-158]. Prof. Meera Mahalingam from Boston University School of Medicine, USA is a board certified pathologist with research expertise in Cutaneous Pathology. Dermatology. Dr. Mahalingam authored Proliferative Nodules in Congenital Nevi - A Histopathologic, Genetic and Immunohistochemical Reappraisal giving knowledge about histologic features of proliferative nodules and to find out the utility of immunohistochemistry and examinations of oncogenic changes in signaling segments of the MAP kinase pathway as demonstrative assistants [159-165]. Skin biopsies regularly are done to analyze skin growth, which might be associated when an area of skin has changed its colour, shape, size, or appearance or has not recuperated after damage. Skin tumors are the most well-known type of cancer [186-201]. Patch testing is demonstrated when Allergic contact dermatitis is suspected and does not react to treatment. In Patch testing, standard contact allergens are applied to the upper back utilizing glue mounted patches containing the minute amount of allergen or plastic chambers containing allergen held set up with permeable tape. Thin-layer quick utilize epicutaneous (TRUE) patch testing includes 2 glue strips that can be connected and deciphered by any medicinal services expert. Skin under the patches is assessed 48 and 96 h after application [21,69,156]. False-positive outcomes observed when concentrations incite an irritant rather than an allergic reaction when the response to one antigen triggers a nonspecific response to others, or with cross-responding antigens. False-negative outcomes observed when patch allergens do exclude the offending antigen. Confirmation conclusion requires a history of exposure to the test agent in the original area of dermatitis [190-196].

CONCLUSION

Skin diseases are most prominent and prevalent in USA. Many pioneering technologies have been invented to reduce the effects of the various skin disorders. The skin is an important physical, biochemical, and immunological hurdle against pathogenic affront and is made up of the upper epidermis and the lower dermis. All this information can be accessed in open access health care literature which exhibits the novel techniques and innovative researches taking place in the research field. Many professionals share their views; suggestions through the open access literature which can be accessed by researchers in order attain knowledge on skin diseases. Although skin diseases are the major problems in USA, the developed technologies, awareness through the literature have given hope to the patients for reducing the effects.

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