



RESEARCH ARTICLE

ENHANCING THE PARENTAL ROLE IN CONTROLLING PEDIATRIC ATOPIC DERMATITIS; A NARRATIVE REVIEW

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Abstract

Introduction: Atopic dermatitis (AD), is the most common chronic inflammatory disease of skin among children globally with increasing prevalence. It tends to cause psychological, functional, and social disabilities in the afflicted patients and their families, overloading them with time-consuming disease treatments along with dietary changes, household responsibilities, and the burden of the financial impact of the disease.

Aim: This literature review discusses the importance of the role of parents in controlling pediatric atopic dermatitis.

Methods: A total of 4109 articles were found via an online search of the MEDLINE/PubMed, Embase, the Cochrane, ScienceDirect medical literature databases and were screened for relevance for this disease.

Results: Understanding atopic dermatitis, including its causes, chronicity, regular flaring nature and the therapeutic ways is very important for the management of the disease. Parents of children affected with AD should ensure that their children show good compliance with their treatment plans. However, parents also experience anxiety and psychological pain because of responsibility and the issue of uncertainty about their children's disease. Complete support and cooperation from parents and family members as primary caregivers for the management of disease plays a significant contribution in the successful treatment of childhood AD.

Conclusion: In order to improve long-term treatment outcomes in childhood AD, Parental support and therapeutic education is crucial in dealing with the symptoms of AD and its chronicity.

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Introduction:-

Atopic dermatitis (AD) (also called atopic eczema) is a chronic inflammatory and pruritic skin disease.¹ AD is commonly divided into three phases: infantile, childhood, and adult.² In countries like Europe and the USA, recent literature shows that the prevalence of AD in children is around 20% and, in cases of adults, it varies between 7% to 14%, with marked differences between countries.^{3,4,5,6,7} The prevalence of physician-diagnosed atopic dermatitis in Saudi Arabia was approximately 12.5%.⁸

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AD shows excessive pruritus with fluctuations on and off. The disease is usually seen in infancy and childhood and can continue to adulthood.⁹ In 20% of cases, the disease is seen under two years of age.¹⁰ Early diagnosis and treatment can prevent the disease morbidity.¹¹ The disease has considerable effects on the quality of life of affected patients and their families as well.⁹ The treatment eases out symptoms which only helps in disease management, but does not cure it. Proper treatment also aids in preventing disease burdens, including behavioral problems, growth impairment, sleep disturbances, and infections.⁹ Parents play an essential role in controlling and managing their child's atopic dermatitis. Education of parents regarding appropriate skin care and treatment plans is vital. Parents should be taught how to identify triggers for the child's flare-ups. They should receive guidance on proper moisturizing techniques using emollients and wet wrap dressings.¹ Parents need to understand the appropriate use of the prescribed topical treatment based on the severity of the skin lesions. They must ensure compliance with the prescribed treatment regimen and follow-up appointments. With knowledge and proper techniques, parents can help significantly reduce the frequency and severity of flares and improve the quality of life for their atopic child.²

AD is a complex and multifactorial disease. The disease is caused by a combination of genetic and environmental factors but the exact cause is unknown.⁹ Twin studies show a high concordance rate with identical twins depicting seven times increased risk of disease and fraternal twins having three times increased disease risk.¹² It is also noted that early-onset of AD shows polymorphisms within the CTLA4 gene at 2q33.¹³ Various factors are implicated in disease pathogenesis, however, the most important factors are skin barrier defects, microbiome defects and dysregulation in immune responses.¹⁴

The most important pathophysiology of AD includes dysfunction of the natural skin barrier. The filaggrin (FLG) mutation is implicated as the primary mutation responsible for AD. The R501X and 2282del4 FLG mutations have been reported to cause total loss of FLG products in the majority of cases.¹⁴

In the stratum corneum (SC), FLG is degraded into a natural moisturizing factor (NMF), which is important for skin barrier function. FLG null mutations cause a lack of NMF, xerosis (dry skin), and a disruption in epidermal barrier function, allowing external allergens to penetrate the skin and cause allergies.¹⁵

The disruption of the pro-FLG to FLG processing (a normal phenomenon during the transition from stratum granulosum to SC), leads to formation of a large water gradient across the SC layer which increases transcutaneous water loss causing dry skin.¹⁴ FLG loss-of-function mutations have been observed in cases of AD having early childhood onset, more severity, and persistence into adulthood.¹⁵

Antimicrobial barrier is another important barrier disrupted in AD.¹⁴ NMFs have been shown to favor adhesion of non-pathogenic bacteria leading to preventing infections. The disintegration of this barrier with loss of NMFs causes colonization of the skin by *Staphylococcus aureus*.^{14,16}

The Inflammatory cascade describing it as a biphasic T cell disease is significant in the pathogenesis of AD.¹⁴ The early phase of AD shows the dominance of Th2 signals and a transition from Th2 to Th1 supports disease chronicity.¹⁷ Recent literature states that for the initiation and maintenance of AD, IL-22 producing T cells and IL-17 producing T cells are required. Acute lesions also show cells expressing mRNA for Th2 cytokines, like IL-4 and IL-13, whereas chronic lesions show more cells expressing mRNA for INF- γ .¹⁸ Acute AD is associated with infiltrations of CD3+ T cells, CD11c+ dendritic cells, and CD1c+ dendritic cells, while chronic AD is associated with more severe infiltrations.¹⁷

AD shows a chronic, relapsing course. Therefore, it becomes impossible to estimate the activity period or identify factors aggravating the disease.¹⁵ The factors noted in the AD patients which have been observed to cause flares include vaccinations (measles, mumps and rubella) and viral infections (measles),¹⁹ herpes simplex virus-1 and eczema cosackium.²⁰

External factors implicated in disease flares include irritating clothes like woolen clothes, sweating, dry weather, stress, smoke, seasonal allergens like dust, animal hair (if patient is allergic to), food allergies, fragrances, clothes detergents and softeners.²¹

Food hypersensitivities (mainly due to eggs, milk, peanuts, soy, and wheat) can cause AD flares in 10% to 30% cases.²² Avoidance of foods should be recommended only in cases of documented allergies to suspected foods. Hot water can also exacerbate itching, and patients should try to refrain from long periods in showers.^{12,14.}

Significant of the study:-

Atopic dermatitis (AD) is a chronic skin condition that not only affects the physical well-being of children but also has a profound impact on their psychosocial aspects and the overall quality of life for both the children and their family. Recognizing the crucial role parents play in managing and controlling AD is essential, as they are often at the forefront of their child's care, responsible for implementing treatment regimens, monitoring symptoms, and addressing the emotional implications of the condition. This narrative review aims to explore and synthesize existing literature to enhance our understanding of the parental role in the control of pediatric AD.

The primary aim of this study is to provide a comprehensive overview of the parental role in controlling pediatric atopic dermatitis and to highlight strategies that can enhance their effectiveness in managing the condition. By reviewing relevant research articles and synthesizing their findings, this study aims to shed light on various aspects of the parental role, including its impact on the child's quality of life, psychosocial factors, dietary considerations, sleep patterns, behavioral aspects, and economic implications. The study aims to contribute to the existing body of knowledge in the field, providing healthcare professionals with valuable insights and practical recommendations to empower parents in their efforts to control and manage pediatric AD effectively. Ultimately, the study seeks to improve the well-being and outcomes for children with AD and their families, promoting a comprehensive approach that recognizes the importance of parental involvement in the care and control of this chronic skin condition.

Methods:-

To conduct this narrative review, a comprehensive and systematic search of the medical literature was performed. Medical databases including MEDLINE/PubMed, the Cochrane Library, Embase, and ScienceDirect were extensively searched using a combination of relevant keywords. The search terms used were ("pediatric" OR "child" OR "childhood" OR "parents" OR "family" OR "caregiver") AND ("atopic dermatitis" OR "AD" OR "eczema") AND ("quality of life" OR "effect" OR "psychosocial" OR "diet" OR "sleep" OR "behavior" OR "cost" OR "economic" OR "finance").

Only articles published in the English language and prior to June 2021 were considered for inclusion in this review. This criterion was chosen to ensure that the most up-to-date and relevant research findings were included. The initial search yielded a total of 4,109 potentially applicable citations based on the specified search terms.

Following the initial search, a thorough screening process was conducted to identify the most pertinent articles for inclusion. The screening involved reviewing the abstracts and titles of the identified citations. Any articles that were not relevant to the parental role in the management and control of pediatric atopic dermatitis were excluded from further analysis.

Additionally, a manual search was conducted to identify any additional relevant articles. This involved reviewing the reference lists of the identified articles to identify any additional sources that may have been missed during the initial search.

After the screening and manual search process, a total of 92 full-text articles were deemed suitable for inclusion in the present review (Figure 1). These articles were carefully analyzed and synthesized to provide a comprehensive overview of the role of parents in the control and management of pediatric atopic dermatitis, with a particular focus on the impact on quality of life, psychosocial aspects, dietary considerations, sleep patterns, behavioral factors, and economic implications.

The inclusion of a wide range of studies and the systematic search process employed in this review ensure the reliability and validity of the information presented. By incorporating evidence from multiple sources, this review aims to provide a comprehensive understanding of the parental role in pediatric atopic dermatitis and its impact on various aspects of the condition.

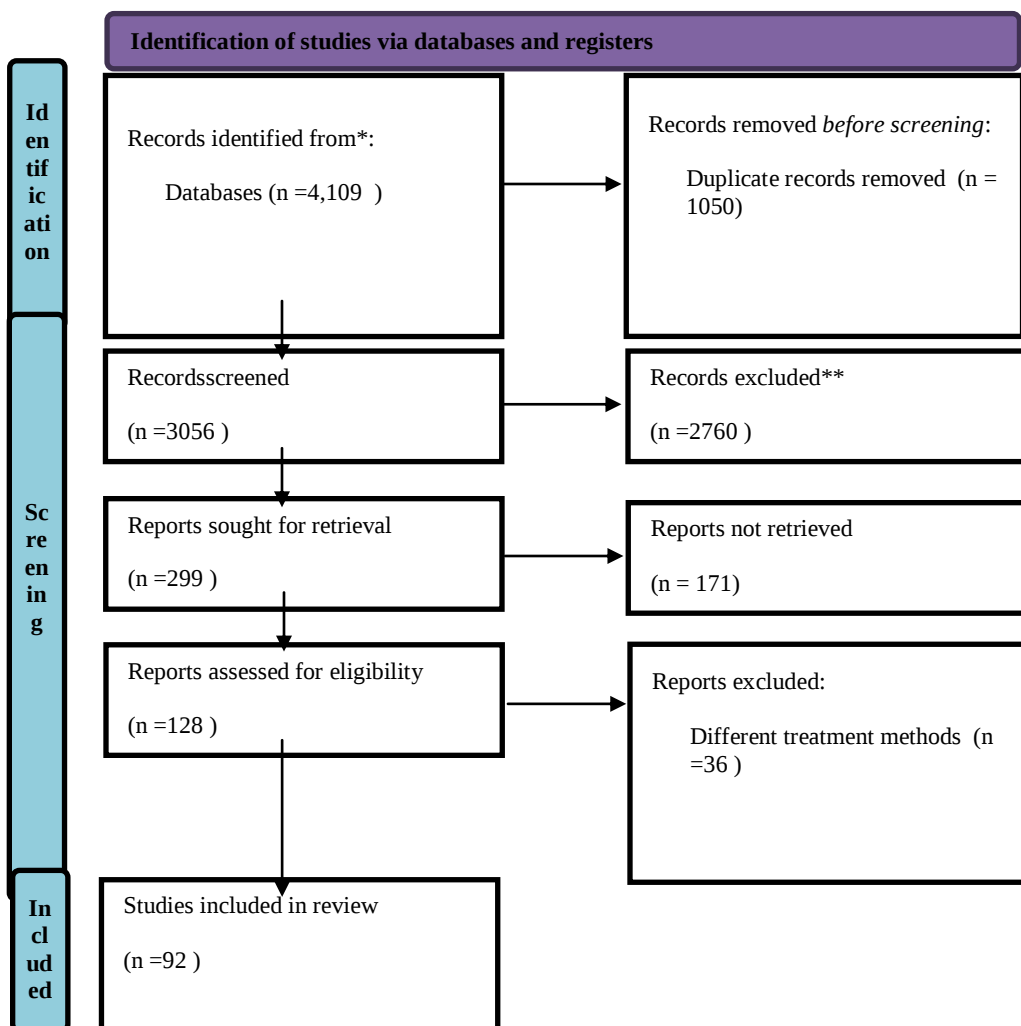


Figure 2:- Flow chart of article selections

Results and Discussion:-

AD has a rising incidence rate.²³ It is very challenging for the children and their families as well.^{21,24} AD produces physical burdens such as requiring strict allergen controls and frequent application of an ointment or a moisturizer on the affected skin, plus sleep deprivation related to severe itching and subsequent exhaustion and fatigue. These symptoms can also lead to children's unstable emotional and behavioral status such as frustration, depression, anxiety, restlessness, and difficulty in concentration, which in turn, can lead to difficulty in parenting and family functioning.^{21,24,25} The disease burden is also aggravated as it becomes difficult for the parents to set precise and clear boundaries for affected children.^{21,24,26}

Atopic dermatitis in children can place a significant mental, physical and financial burden on parents. With flare ups causing severe itching, pain and discomfort, parents must constantly monitor their child's symptoms and adjust treatments. Sleep deprivation is common as atopic dermatitis often worsens at night. Parents lose sleep caring for their distressed child and due to the child's disrupted sleep patterns. This lack of sleep can in turn negatively impact the mental and physical health of parents.

The unpredictable nature of atopic dermatitis flare ups means parents must always be on alert for changes in their child's symptoms. It requires being hypervigilant about potential triggers in the environment that could cause flare ups. Parents have to make numerous adjustments to routines, meals, laundry and household products. The resulting stress and anxiety can significantly impact parental wellbeing. Relationships with partners and other children may suffer from the demands of caring for an atopic child.

The financial costs of atopic dermatitis treatments such as frequent doctor's visits, prescriptions and special soaps, self-products and detergents also fall on parents. Many parents miss work due to needing to care for their child during flare ups. The parental burden of atopic dermatitis is multi-faceted and can seriously impact family functioning if not appropriately supported. With the right education and resources, parents can minimize the negative effects and best support to their atopic child.

In addition, the atopic disease can cause high levels of parenting stress, ineffective family functioning, and poor psychosocial well-being and quality of life for the parents.²⁷⁻³¹ The tension created by increased parental stress and the physical and psychosocial burden has been linked to the less secure attachment between mother and child.³²⁻³⁴

Child Behavior and Atopic dermatitis

It has been shown in various studies that AD affected children are very clingy, fearful, and dependent.³⁵ They are found to have many behavioral difficulties as compared to unaffected children, these traits are exaggerated in children with more severe disease. Due to sleep disturbances in AD, there is increased daytime sleepiness, discipline problems, and irritability in these cases.³⁶⁻³⁸ In addition, affected children are more vulnerable to mental health issues, like depression, autism, conduct disorder, attention deficit hyperactivity disorder, and anxiety.^{36,38} These observations are supported in various studies. A study by Yaghmaie et al. showed an association between mental health disorders and AD in the pediatric population of the United States.³⁹ A study by Strom et al. showed association of AD with chronic itch, allergic diseases and sleep disturbances. All of these tend to increase the probability of development of attention deficit hyperactivity disorder (ADHD).⁴⁰

Parental sleep disturbance

Almost all the parents of young infants have to go through sleep deprivation and disturbances but in AD cases, the scenario is even worse.⁴¹ Overnight care of children with AD becomes complicated because parents have to solve two problems on awakening: control of nighttime itching and putting their child back to sleep. Various strategies are used to manage these problems, including itch prevention, applying topical medications, changing the temperature of the child's room, and cuddling.³⁸ Managing nighttime exacerbations of pruritus can be time-consuming. They cause sleep loss of one to three hours per night for parents of afflicted children. The loss of sleep is very crucial for parents as disruptions and loss of sleep are associated with depression, anxiety, and higher chances of motor vehicle accidents and accidents at the workplace.^{38,42} The previous studies on parent's interviews have shown various issues faced by parents leading to difficult marital relationships.^{25,27,38,43} The marital relationships of parents are also affected as considerable time is required for the care of the afflicted children.³⁸

Financial costs and atopic dermatitis

The burden of AD is very high on an economic basis, however, global literature on disease costs throughout the last decade is inadequate.³⁸ Both prescription medications and over-the-counter moisturizing options are necessary for AD treatment and prevention of flares, so costs of medical care alone for AD can become very high, particularly when patients' symptoms are not well controlled.⁴⁴ However, the financial burden of AD can extend beyond the direct costs of health services. Families frequently incur additional costs for transportation, home environment changes, homeopathic or alternative treatments, and work productivity losses.⁴⁴ Children affected by moderate-to-severe AD may require near-constant attention and treatment, so work loss can become an issue for caregivers.³⁸

In cases of Pediatric AD, there can be high direct and indirect costs, as the treatment of disease is not easy. In addition, medical care is also required on a frequent basis. A recent study on children with moderate-to-severe AD and their families showed that expenditure on AD was approximately 34.8% of the available salary. Hence, the management of AD has a considerable impact on the income and expenditure of families.^{38,44}

Parental work difficulties

Parents can spend 2-3 hours per day just treating AD and spend additional time outside of care to prevent itching and to bring children to doctor's appointments.³⁸ Caregivers often miss working to care for their children's health issues, resulting in direct income loss due to decreased working hours. Although not yet studied, lost sleep compounded with work loss and decrease job performance in parents of affected children.^{35,38,45}

Home environment modification

Patients' families usually modify the atmosphere of their homes in order to decrease the exposure of their children to potential allergens or irritants. Switching laundry detergents and soaps, buying special clothing and linens, and

changing and washing bedding and pillows more frequently can be both costly and time-consuming but may help manage the AD and reduce the risk of flares in some patients. However, finding detergents, soaps, and clothing materials that do not worsen their children's skin condition can require trial and error. These alterations to the child's environment ultimately increase housework and time spent shopping, both of which can impact the family's quality of life.^{15,38}

Parents role in the treatment of Pediatric AD

Educating patients plays an important role in the self-management of AD. Education is necessary for using topical treatment in the correct way. The educational program aims to enhance knowledge of AD among parents, creating an improved disease understanding and thus supporting an active form of treatment method for the affected ones and their families. An interdisciplinary and structured educational program covering nutritional, medical, and psychological aspects of AD has been recommended for the improvement of the quality of life of children and families affected by AD. Literature states that a combination of conventional treatment and educational programs is very effective for disease's long-term control and management.⁴⁶⁻⁵² Moisturizing the skin is essential. Emollients and moisturizers rehydrate dry skin, soothe itching and inflammation, and form a protective barrier. Parents should apply moisturizers liberally to damp skin after bathing, then pat dry. They should avoid products with fragrance, dye and alcohol which can irritate the skin³. Adhering to topical treatments is key. Parents should apply corticosteroids during flare-ups to reduce inflammation and itching. They calm the skin, speed healing of lesions and prevent new ones. However, parents must use them correctly⁵. This means applying appropriate amount according to the size to affected areas (see section 5.3). For long-term control, other non-corticosteroid treatments such as calcineurin inhibitors could be used. suppress the immune response underlying eczema. Parents must apply them daily as prescribed⁶. Parents should make lifestyle adjustments. Using fragrance-free detergents and avoiding synthetic or wool fabrics that irritate the skin can help. Parents should wash all soft toys, blankets and stuffed animals weekly in fragrance-free detergent to remove allergens⁷. Using air purifiers and humidifiers can also reduce indoor allergens and dry air that exacerbate eczema. Stress management techniques like meditation, yoga and talking to others can benefit both children and parents⁸. Regular communication with providers is needed. Parents should go to all appointments and ask questions to clarify instructions for treatments and symptom management. They should express any difficulties adhering to the treatment regimen and discuss strategies to improve. Healthcare providers can then monitor progress, adjust medication dosages and educate parents on techniques to enhance their efforts at home⁹.

Good routine and record keeping helps. Parents should establish a daily and nightly skin care routine to stay consistent with treatments. They should keep a symptom journal to track flares and potential triggers. This record allows providers to identify environmental factors or behaviors that worsen the condition. Parents and providers can then work together to modify the child's exposure and activities accordingly¹⁰. Emotional support is also important. Atopic dermatitis can impact a child's self-esteem and confidence. Parents should listen attentively and reassure the child that they are there to help. They can boost the child's self-confidence by focusing on abilities rather than appearance. If needed, parents can enlist the help of behavioral health professionals and support groups¹¹. Connecting with others can provide relief. Support groups allow parents to share experiences, advice and coping strategies. Parents can realize that they are not alone in dealing with this condition. They can gain valuable insight from others who are facing similar challenges. Such connections can lower parents' stress levels and enable them to gain a more positive perspective on managing their child's atopic dermatitis¹².

Therapeutic patient education (TPE)

Parents try to get information from various sources for managing their AD-affected children. The various ways are searching information from the internet, seeing many websites or discussion forums. Incomplete information or misunderstandings about AD in parents of children with AD can cause inadequate results.⁵¹ In 1998, the World Health Organization and European Working Group defined "therapeutic patient education (TPE) as a process that enables patients to acquire and maintain skills that optimize management of their lives with their disease." It was conceived as a continuous process integrated with health care.⁶⁴ There is some data on the use of (TPE) in chronic dermatologic disorders such as psoriasis and AD that have lessened the severity of these diseases. Therapeutic patient education is a form of the continuous, systematic, patient-centered learning process to help patients and their families gain and sustain the skills required for managing life with a chronic disease. This method is efficacious as it has improved adherence to treatment and quality of life for AD cases in Western countries.^{59,65} Children affected with AD usually have behavioral problems like more fearfulness, sleep issues, and increased dependency. Supporting parents in dealing with AD management is very challenging for treating physicians. Educational

programs for parents and patients with AD have been established in the last ten years in different European countries.^{46,66,67} In addition, parents' attitude toward their child's illness plays a significant part in successful management.⁶⁸ Nevertheless, successful control of AD in children depend on parents, their knowledge related to the disease, and their attitude toward the ill child.^{51,69}

TPE has been proven in studies to have beneficial benefits on disease progression, complication prevention, patient autonomy, and quality of life. For AD patients, topical medications are the main cornerstone of treatment, however, adherence is limited due to factors such as corticophobia. The effective interchange of skills and knowledge between healthcare professionals and patients with the help of TPE is required to ensure that patients obtain proper therapy and benefit from skin care treatments.⁷⁰

It becomes essential to explain the difference between oral and topical corticosteroids to patients by caregivers, and to debunk the misperception that various topical corticosteroid treatments can be directly compared on the basis of their percentage strengths.⁷¹

Frequent onsite and/online follow ups are important for AD. It was found in a study published in JAMA Dermatology that online follow-ups are as effective as in-person patient visits.⁷²

Long-term adherence to properly designed, tailored techniques for the best treatment outcomes in AD cases requires educating parents and spending more time with them during medical appointments. Because the primary source of such education is the health care provider, a strong provider connection is essential.⁷¹

Treatment modalities for AD

AD is a chronic disease. The AD treatment aims to reduce the number of flares of the disease and minimize the degree and duration of the flares.

Moisturizers and bathing

Treatment of AD is aimed at suppressing inflammation, eliminating identified triggers, reducing pruritus, and combating the development of xerosis.⁷³ Topical moisturizers and emollients are the basis of AD treatment, as they prevent dehydration, soften the skin, and increase water retention.⁷⁴ They also reduce the requirement for pharmacological drugs for the treatment of AD.^{70,75} In mild AD cases, moisturizers are the first line of management and they form a primary and significant part of treatment in moderate and severe AD.⁷⁷

Lotion, creams, and ointments are all different types of moisturizers commonly used in skincare. These products serve the purpose of hydrating and nourishing the skin, helping to alleviate dryness, and improve overall skin health. While they are all moisturizers, there are distinct differences between lotions, creams, and ointments¹³.

Lotions are lightweight and have a high-water content, making them easy to spread and quick to absorb into the skin. They often have a thinner consistency and are suitable for individuals with normal to slightly dry skin. Lotions are commonly used for daily moisturizing and can be applied to larger areas of the body¹⁴.

Creams, on the other hand, have a higher oil content compared to lotions, resulting in a thicker consistency. They provide a more substantial barrier to prevent moisture loss from the skin and are suitable for individuals with dry or sensitive skin. Creams tend to be more emollient, helping to soothe and moisturize the skin effectively¹⁵.

Ointments are the thickest and most occlusive type of moisturizer. They have a high oil content and provide a heavy barrier on the skin, preventing water loss and locking in moisture. Ointments are typically used for extremely dry or damaged skin conditions, such as eczema or psoriasis. They can be particularly beneficial for areas that require intensive moisturization, such as elbows, knees, or severely dry patches¹⁶.

Bathing with water can remove irritants, allergens, and squama (scales) in atopic dermatitis, allowing for the repair of the skin barrier. Non-soap cleansers, which are low in pH and hypoallergenic, are recommended as soap substitutes, as they cause less disruption to the stratum corneum structure and acid mantle.⁸¹ These cleansers are often referred to as syndet (synthetic detergent) bars or liquids. They are designed to be gentle on the skin and are commonly recommended as soap substitutes, especially for individuals with sensitive or dry skin¹⁸.

One important characteristic of non-soap cleansers is their low pH. The pH scale measures the acidity or alkalinity of a substance, and for the skin, maintaining a slightly acidic pH is crucial. The normal pH range of healthy skin is around 4.5 to 5.5. Non-soap cleansers are specifically formulated to have a pH that is closer to the natural pH of the skin, making them mildly acidic¹⁹.

By having a low pH, non-soap cleansers help to maintain the integrity of the stratum corneum, which is the outermost layer of the skin, and the acid mantle, which is a protective barrier formed by the skin's natural oils and beneficial bacteria. This is important because disruptions to the stratum corneum and acid mantle can lead to skin dryness, irritation, and inflammation^{20, 82}.

Table 1:- Characteristics of the main emollients.⁷⁸

	1st-generation emollients	2nd-generation emollients	3rd-generation emollients
Products	Vaseline, paraffin oil, fatty alcohols, hydrophilic polymers (collagen, ac. hyaluronic acid, chitosan, polysaccharides gelling)	Glycerol, sorbitol, substitutes NMF (Natural Moisturizing Factor) derivatives of pyrrolidone carboxylic acid, urea (5–10 %), lactic acid, ammonium lactate	Physiological lipids: ceramides, cholesterol, polyunsaturated fatty acids
Mechanism of Action	Hygroscopic and occlusive	Restoring hydration and barrier function	Barrier repair therapy

The fingertip unit for topical agents

In a study published in 1991, the Fingertip unit (FTU) term was given by CC Long and AY Finlay describing an easier way to measure how much cream should be prescribed to a person affected with skin disease.⁸⁵ Topical steroids are ointments, creams, and lotions having steroid drugs. They reduce skin inflammation in many diseases including atopic eczema. The correct dose is very crucial while using topical steroids. Therefore, a standard measure of the fingertip unit works well.⁸⁵ FTU is the amount of topical steroid which can be squeezed out from a tube along an adult's fingertip assuming that the tube has a standard 5 mm nozzle. A fingertip is considered from the end of the finger to the first crease in the finger. One FTU is sufficient for treating an area of skin twice the size of the flat of an adult's hand with the fingers together.⁸⁶

An FTU of cream or ointment can be measured on an adult index finger before being rubbed onto a child. Similarly, one FTU can be used for treating an area of skin on a child equivalent to twice the size of the flat of an adult's hand with the fingers together. The number of topical steroids can be estimated by using your (adult) hand to measure the amount of skin affected on the child. This can figure out the number of topical steroids to use.⁸⁶

Food allergy and Atopic dermatitis

It has been demonstrated in clinical studies that the prevalence of food allergy in AD varies from 10% to 30%.²² Food allergy in AD can cause both IgE-mediated and non-IgE-mediated eczematous reactions. IgE-mediated food allergy accounts for 40%–60% of all food allergies. Even in the absence of an AD flare, food allergies can present as hives, flares, itching, and other cutaneous symptoms.⁸⁷

The usual food allergens which trigger AD are peanuts, soy, seafood, wheat, eggs, shellfish, milk, and milk products. The study has shown that food allergy has a significant role in aggravating severe forms of AD, and diet elimination reduces its severity.⁸⁷

Food elimination diets must only be undertaken supervised by a medical specialist (allergy specialist or clinical immunology or accredited practicing dietitian) because nutritional deficiencies can occur. In a child suffering from food allergy proven by oral challenge, an elimination diet can work however treatment of AD must be continued.⁸⁸ Parents should not start eliminating diets for their children on their own. There is often a discrepancy between the food parents suspect is the AD trigger and the true allergen.¹¹

However, dietary elimination is not done as a routine method as food avoidance does not lead to AD improvement in many cases. Few studies have however demonstrated improvement in AD by using dietary elimination.⁸⁷

Conclusion:-

In conclusion, it is evident that atopic dermatitis (AD) extends beyond its physical manifestations, significantly impacting the psychosocial well-being of patients and exerting a considerable burden on their families as well. While AD is primarily a disease of the skin, its effects can permeate various aspects of life, creating challenges that extend far beyond skin damage and pruritus.

When providing care for children affected by AD, clinicians must recognize the multifaceted nature of this condition and the pivotal role parents play in managing it. Parents often find themselves at the forefront of their child's care, juggling treatment regimens, monitoring symptoms, and addressing the emotional toll that AD can exact on their little ones. As such, it is imperative for healthcare professionals to take into account the psychosocial factors and challenges faced by both the child and their family unit. Beyond the immediate treatment of AD, there are broader treatment goals that encompass the prevention of secondary infections, the provision of support for the psychological well-being of patients, and the enhancement of awareness among the general population and physicians about the profound consequences of the disease. By fostering greater understanding and knowledge, healthcare providers can ensure that patients and their families receive the necessary support and resources to navigate the challenges posed by AD. The intricate interplay between the physical and psychosocial aspects of AD and emphasizes the crucial role of parents in managing the condition. Early intervention, novel therapies, and therapeutic patient education programs all hold promise in mitigating the impact of AD on affected children and their families. By recognizing and addressing the comprehensive needs of patients and their families, healthcare providers can make significant strides in improving the overall well-being and quality of life for those living with AD.

Data availability

NA.

Conflicts of interest

No Conflicts of interest.

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