

RESEARCH ARTICLE:

Skin Disease Prevalence amongst Rural Communities in KwaZulu-Natal Province, South Africa

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Abstract

Little information is known of skin diseases within rural communities in KwaZulu-Natal, South Africa. There is an urgent need to identify plants with antimicrobial activity as there is an increase in the incidence of new and re-emerging infectious diseases. The present study compares species from two different localities used to treat common skin diseases, the parts used, and the method used to prepare traditional cures. The prevalence of skin disease compared to other ailments were also compared. Traditional healers from northern (seven main districts) and mid-KwaZulu-Natal (three main districts) muthi markets were randomly selected and interviewed after obtaining consent. Data collected included the specific plants used to treat skin diseases, common names, parts of the plant used, the collection locality, and the conditions treated by the traditional healers. Fourteen plant species were collected and traded in northern KwaZulu-Natal based on their curative properties and their use to treat wounds, skin lesions, rashes, burns, and scratches compared to only six in mid-KwaZulu-Natal. Approximately 43 percent of species were common to all districts, possibly due to their wide distribution. People with skin diseases formed the majority of traditional healer consults. Most conditions were very similar, possibly due to rural communities following a similar lifestyle. Skin infections and eczema were commonly treated conditions, followed by acne, hair disorders, and bruises. Skin diseases are common amongst rural community dwellers in KwaZulu-Natal regardless of location, possibly due to their association with HIV infection. The plants used by traditional healers to treat various conditions are related to geographical distribution and abundance patterns.

Keywords: skin disease; traditional healers; medicinal plants; rural communities; COVID-19

Introduction

The skin is the largest organ of the human body, serving as a protective barrier against external factors (Anwar *et al.*, 2022). However, it is susceptible to various diseases that can affect its appearance, function, and overall well-being. Skin diseases encompass a wide range of conditions, from common ones like acne and eczema to more severe disorders like psoriasis and skin cancer. Skin diseases pose a significant health burden worldwide, affecting individuals of all ages and backgrounds (Dlova, 2018). While these conditions are prevalent in both urban and rural areas, rural communities often face unique challenges in terms of access to healthcare, education, and resources (Dlova, 2018; Mabona and Van Vuuren, 2013). The diverse population and geographical landscapes of the country contribute to a wide range of skin conditions. Skin diseases are widespread in rural areas due to various factors such as (Mothibe and Sibanda, 2019; Anwar *et al.*, 2022): (i) limited access to clean water and sanitation facilities can lead to poor hygiene practices, making individuals more susceptible to infections and infestations; (ii) rural populations often engage in outdoor occupations, such as farming or manual labor, which can expose them to environmental irritants, allergens, and sunlight, leading to specific skin conditions; and (iii) inadequate healthcare

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infrastructure and a lack of dermatological services in rural areas contributes to delayed diagnosis and treatment, exacerbating the burden of skin diseases.

Skin diseases have a significant impact on the quality of life and socioeconomic well-being of individuals in rural areas (Clucas *et al.*, 2009). These conditions can cause pain, discomfort, and itching, leading to sleep disturbances, reduced work productivity, and decreased school attendance. Moreover, the stigma associated with visible skin conditions can lead to social isolation and psychological distress (Clucas *et al.*, 2009). Consequently, the overall economic productivity of rural communities can be compromised due to the burden of skin diseases. Scholars such as Mothibe and Sibanda (2019) and Knapp *et al.* (2021) note that challenges in skin disease treatment in rural South Africa include: (i) rural areas in South Africa often lack adequate healthcare facilities, including dermatology clinics and specialised healthcare professionals. This limitation hampers early diagnosis, timely treatment, and the management of skin diseases. (ii) The scarcity of dermatologists in rural areas leads to delayed or absent dermatological consultations, resulting in inappropriate management of skin diseases. Primary healthcare workers are often not adequately trained in diagnosing and treating skin conditions. (iii) Remote rural areas are geographically isolated, making it challenging for individuals to access healthcare facilities. Limited transportation options, long distances, and poor road infrastructure can prevent patients from seeking timely medical attention. (iv) Poverty, limited financial resources, and a lack of health insurance coverage can prevent individuals from accessing proper treatment. The cost of medications, consultations, and travel expenses can be prohibitive for rural populations. (v) Language diversity and cultural beliefs can create barriers in effectively communicating symptoms, understanding treatment plans, and following through with prescribed regimens. Healthcare providers may lack the necessary linguistic and cultural competencies to provide appropriate care. (vi) While the use of medicinal plants has a long history of use, the scientific evidence supporting its effectiveness for specific skin diseases may be limited. More research is needed to validate the efficacy and safety of traditional remedies, especially through rigorous clinical trials. (vii) Integrating traditional medicine into modern healthcare systems can be challenging due to differences in diagnostic approaches, treatment protocols, and regulatory frameworks. Collaborative efforts are necessary to bridge this gap and promote the safe and effective use of traditional medicine in skin disease treatment.

In sub-Saharan Africa, skin conditions are dominated by bacterial and fungal infections and their clinical expression is often modified by HIV-induced immune suppression (Moonasar *et al.*, 2021). Most infections inevitably involve residents in resource-poor communities (Naidoo and Coopoosamy, 2011). Skin infections are among the most common reasons for individuals visiting primary health care centres in remote communities around the world (Clucas *et al.*, 2008). However, due to the scarcity of these clinics in rural areas, many inhabitants have no access to primary health care (Mothibe and Sibanda, 2019). Most rural dwellers are treated by traditional healers that prescribe herbal medication based on the knowledge that is passed down from generation to generation (Naidoo and Coopoosamy, 2011). Traditional medicine, with its deep roots in cultural practices and indigenous knowledge, has been employed for centuries to treat various ailments, including skin diseases. Traditional medicine systems around the world, such as Traditional Chinese Medicine, Ayurveda, and African Traditional Medicine, have developed sophisticated approaches to understanding and managing skin conditions (Dlova *et al.*, 2018). Traditional healing plays an integral part in black African culture, with most people consulting traditional healers (Naidoo and Coopoosamy, 2011). African Traditional Medicine utilises a diverse range of medicinal plants with specific properties to treat skin conditions. Plant extracts, ointments, and washes are used for their anti-inflammatory, antimicrobial, and wound-healing properties. Many plants are collected by traditional healers and used to treat a variety of skin ailments. The use of medicinal plants for treating skin diseases has a long history in South Africa, where traditional healing practices have been passed down through generations. Many indigenous communities in South Africa rely on medicinal plants to address various skin conditions. Here are a few examples of medicinal plants commonly used for treating skin diseases in South Africa (Sobiecki, 2014; Goge *et al.*, 2023; Govender *et al.*, 2023):

- *Agathosma betulina* (Buchu): Buchu is a shrub native to South Africa, and its leaves have a long history of use in traditional medicine. Buchu leaves are known for their antiseptic, anti-inflammatory, and diuretic properties. They are used topically to treat acne, eczema, and other skin infections.
- *Aloe vera* (Aloe spp.): Aloe vera is widely known for its soothing and healing properties. The gel extracted from its leaves is used to treat burns, sunburns, wounds, and various skin conditions like eczema and psoriasis.

- *Aspalathus linearis* (Rooibos): Rooibos is a popular herbal tea in South Africa. It is rich in antioxidants and has anti-inflammatory properties, making it useful for soothing skin irritations, including eczema and acne.
- *Eriosephalus punctulatus* (Cape chamomile): Cape chamomile is an aromatic shrub found in the Western Cape region of South Africa. It has anti-inflammatory, antibacterial, and antifungal properties. Cape chamomile oil is used in skin care products to alleviate skin inflammation and soothe sensitive skin.
- *Harpagophytum procumbens* (Devil's Claw): Devil's claw is a medicinal plant found in the Kalahari Desert region of South Africa. It is traditionally used for its anti-inflammatory properties and has been employed to treat conditions like arthritis and eczema.
- *Hypoxis hemerocallidea* (African potato): African potato is a tuber that has been traditionally used in South Africa to treat various skin conditions. It is believed to have anti-inflammatory and immune-boosting properties and is used topically to relieve skin irritations and promote wound healing.
- *Sutherlandia (Lessertia frutescens)*: Also known as the "Cancer Bush", sutherlandia has been traditionally used to treat various ailments, including skin conditions such as rashes, boils, and eczema. It is believed to have immune-boosting and anti-inflammatory properties.

South Africa is known for its rich biodiversity, including a wide range of medicinal plants that have been traditionally used for treating various ailments, including skin diseases. The use of medicinal plants in South Africa's traditional medicine systems, such as African Traditional Medicine and Zulu Traditional Medicine, has a long history and continues to be practiced in many communities. This investigation is undertaken to compare traditionally collected species used to treat common skin diseases from two rural localities in the KwaZulu-Natal province. Northern KwaZulu-Natal (Zululand) consists of several different municipalities or districts, from Mtubatuba stretching to the border with Swaziland, whereas the Midlands extends from Howick to the Drakensberg mountains in the west of the province. Both regions support communities that are primarily rural and resource-poor and rely extensively on traditional medicine to cure various ailments. It is important to document the species used to treat skin disease and determine if there may be an overreliance on herbal remedies, leading to harvesting pressure on existing plant populations. Also, it is important to document the extent of skin condition ailments in rural communities compared to other chronic and acquired conditions. Future healthcare interventions may focus on promoting the mitigation against key ailments to promote community-based healthcare amongst rural communities. This article aims to explore the prevalence, causes, and impact of skin diseases in rural areas, as well as discuss the strategies for prevention, diagnosis, and treatment.

Materials and Methods

Before the study, a signed consent form from each interviewee was obtained. These individuals constituted traditional healers from northern (seven main districts) and mid-KwaZulu-Natal (three main districts) muthi markets. A total of 100 questionnaires, 50 for each region, were administered and collected and the responses tabulated in Tables 1, 2, and 3. Traditional healers from each locality were randomly selected and informed of the objectives of the research before obtaining consent. Data collection included the specific plants used to treat skin diseases, their common names, the parts of the plant used, the collection locality, and the conditions treated by the traditional healers. Individual data collection was as brief as possible in order to not disrupt plant trade. Most traditional healers had difficulty understanding English, therefore, the structured questionnaires were discussed on an individual basis and explained by an interpreter conversant in both Zulu and English. The results were then transcribed by the interpreter as most traditional healers were illiterate. Many of the traditional healers provided the local names of the plants being sold. Validation and verification of medicinal plants was performed by a plant taxonomist against voucher specimens housed within the Medicinal Plant Research Laboratory, Mangosuthu University of Technology. This study is registered at the Mangosuthu University of Technology (Registration Number NSci 04/2010) and consent was approved by the University Ethics Committee. The two communities were chosen based on their relative isolation from major cities, limited access to primary healthcare facilities, and they involve the same culture and traditional belief systems.

Table 1: Medicinal plants used to treat common skin diseases in northern KwaZulu-Natal

Scientific Name	Common Name	District	Parts Used
<i>Albizia adianthifolia</i> (Schumach.) W. F. Wight	Umgadankawu	Mtubatuba	Bark, roots, leaves
<i>Boophane disticha</i> (L. f.) Herb	Incotha	Ulundi	Bulb
<i>Bulbine natalensis</i> Baker	Ibhucu	Mandeni	Leaves, roots
<i>Datura stramonium</i> L.	Iloqi	Pongola	Leaves, fruits
<i>Dioscorea dregeana</i> (Kunth) T. Durand & Schinz	Isidakwa	Nkandla	Tubers
<i>Erythrina lysistemon</i> Hutch.	Umsinsi	Hlabisa	Bark
<i>Gnidia kraussiana</i> Meisn.	Isidikili/Umfuzane	Mtubatuba	Roots
<i>Harpephyllum caffrum</i> Bernh.	Umgwenya	Nongoma	Bark
<i>Haworthiopsis limifolia</i> (Marloth) G. D. Rowley	Umathithibala	All districts	Whole plant
<i>Bulbine frutescens</i> (L.) Willd.	Intelezi	All districts	Leaves
<i>Aloe ferox</i> Mill.	Inhlaba	All districts	Leaves
<i>Lippia javanica</i> (Burm f.) Spreng.	Umsuzwane	All districts	Leaves
<i>Aristaloe aristata</i> (Haw.) Boatwr. & J. C. Manning	Umathithibala	All districts	Leaves
<i>Psidium guajava</i> L.	Gwabisi	All districts	Leaves

Fourteen plant species were collected and traded in northern KwaZulu-Natal based on their curative properties to treat wounds, skin lesions, rashes, burns, and scratches (Table 1). These plants ranged from herbs to trees, with the leaves of most species commonly collected for treating skin diseases. Approximately 43 percent of species were common to all districts, possibly due to their wide distribution. Other species were more localised and may have been collected based on the gatherer's knowledge and experience. Interestingly, two species, *Datura* and *Psidium*, are introduced species and are regarded as aggressive weeds. Certain species such as *Boophane*, *Bulbine*, and *Aloe* have been well documented in previous studies based on their skin disease curative properties (Mabona and Van Vuuren, 2013; Moteetee and Seleteng, 2017).

Table 2: Medicinal plants used to treat common skin conditions in mid-KwaZulu-Natal

Scientific Name	Common Name	District	Parts Used
<i>Acacia leucophloea</i> (Roxb.) Willd.	White babool	Ladysmith	Bark
<i>Gloriosa superba</i> (L.)	Calihari	Ngwavuma	Seeds, tuber
<i>Withania somnifera</i> (L.) Dunal	Ubuvimba	Ngwavuma	Leaves, roots, bark
<i>Xysmalobium undulatum</i> (L.) W. T. Aiton.	Ishongwe	Bergville	Roots
<i>Aloe ferox</i> Mill	Inhlaba	All districts	Leaves
<i>Artemisia afra</i> Jacq. Ex Willd.	Umhloniyane	All districts	All parts

Fewer species were collected from mid-KwaZulu-Natal; however, this may be due to fewer markets in this region. Also, the colder climate may limit the medicinal plants growing within this region. Approximately 33 percent of species were common within the markets, with the leaves being the most common part collected for skin disease curative properties. *Aloe ferox* was traded abundantly in both northern and mid-KwaZulu-Natal markets indicating its wide distribution and holistic healing properties. No introduced species were harvested for curative properties, although further investigation covering a wider area is necessary to confirm this.

Table 3: Summary of conditions treated by medicinal healers in Northern and mid-KwaZulu-Natal districts

Conditions	Northern Kwazulu-Natal Districts (%)	Mid-Kwazulu-Natal Districts (%)
Stress	5	4
Heart disease	1	3
Skin disease	25	20
Gastrointestinal ailments	11	12
Female reproductive health	9	5
Colds/Flu/Fever	16	18
Respiratory disorders	14	16
Blood circulatory disorders	7	10
Nervous system disorders	2	5
Tooth and gum disease	0	1
Other ailments (arthritis, stroke)	10	6

People with skin disease formed the majority of traditional healer consults (Table 3). Most conditions were very similar, possibly due to rural communities following a similar lifestyle. The low incidence of heart disease, stress-related, tooth and gum disease, and nervous system disorders are standout features within these communities

and may reflect dietary and lifestyle modifications necessitated by living in rural rather than urban areas. Surprisingly, no reports of HIV treatments were reported. This is important since the prevalence of HIV may lead to patients being susceptible to further diseases. It was of concern to note that respiratory disorders were also frequently treated by traditional healers. The prevalence of COVID-19 may exacerbate this condition, leading to greater loss of life if rural dwellers become exposed.

Table 4: Summary of skin conditions treated by medicinal healers from Northern and midland KwaZulu-Natal districts

Skin Conditions	Northern KwaZulu-Natal Districts (%)	Mid-KwaZulu-Natal Districts (%)
Infections	36	28
Eczema	20	24
Acne	10	15
Hair disorders	8	12
Bruises	8	12
Abscess	6	4
Cellulitis	5	2
Burns	5	2
Dyschromia	2	1

Patients treated for skin infections were more frequently treated by traditional healers than those with eczema, which is more common in people that have a family history of the condition. Infections may be caused by a variety of microbes, including bacteria, viruses, and fungi. Infections may lead to other mentioned problems such as cellulitis and abscess development. Other conditions such as acne and hair disorders may be caused by pathogenic bacteria present on oily skin surfaces. Also, any skin that is damaged may become infected. Burns may be common to residents that rely on wood fires and the use of paraffin to fuel cooking fires. Dyschromia was the least treated skin disorder, which is not surprising as pigmentation problems are rare in indigenous African communities. The recent revelations of COVID-19's association with dermatological disorders are concerning as skin disruptions may render individuals more susceptible to becoming infected with the coronavirus. The skin disorders in Table 4 were very broadly categorised and a more in-depth study may be required to obtain greater clarity.

Discussion

Medicinal plants used by traditional healers to treat skin diseases in northern KwaZulu-Natal are listed in Table 1. *Albizia adianthifolia* is a common and highly revered tree in several districts in the northern parts of KwaZulu-Natal. The roots and leaves of the tree are crushed into a paste and applied directly to the skin to treat common superficial diseases. Also, the bark is boiled in hot water, strained, cooled, and then drunk to reduce eye inflammation and skin swellings. The brew is also effective in treating headaches. The gel-like juice of *Aloe ferox* is applied directly to the skin to treat burns, cuts, skin lesions, and open wounds. The gel is said to possess antimicrobial properties and aids in wound healing. Exudate from the bulbs of *Boophane disticha* is mainly used as a dressing after circumcision and applied to septic wounds and boils. The bulbs are ground into a paste or mixed with *Aloe* gel to make the paste more effective. The leaves of *Bulbine natalensis* are crushed and the juice is applied to the skin surface to treat wounds, burns, rashes, and itches. Immediate application of the exudate from fresh material is necessary to enhance skin healing. According to many healers, delays may render the exudates ineffective and hamper the wound healing process. The leaves of *Datura stramonium* (also known as thorn apple) are the most important part of the plant used; although, on rare occasions; the use of the fruit has been used to reduce pain and inflammation. Tubers of *Dioscorea dregeana* are routinely used as a paste that is applied to cuts and sores. The tubers are thick and fleshy, thus, yields are generally high. The bark of *Erythrina lysistemon* (common along the east coast of KwaZulu-Natal) is usually crushed and made into a paste which is applied to treat wounds, sores, and abscesses. Although the leaves and roots are sometimes used in times of scarcity, they are not usually considered as important as the bark. Apart from being used for the treatment of burns, decoctions of *Gnidia kraussiana* are also used to treat stomach complaints and snakebites. *Harpephyllum caffra* is an important species used by traditional healers in Nongoma to treat skin problems such as acne and eczema. Boiled concoctions can also be drunk and act as blood purifiers.

Traditional species used by traditional healers in the Midland districts are listed in Table 2. *Swertia chirata* is frequently used in the Midlands to treat skin diseases and soothe skin irritations. Due to the usage of the entire plant, the wild populations of this species have reduced drastically. Measures have to be put in place to educate

harvesters to maintain the sustainability of wild populations for future use. The seed and tuber of *Gloriosa superba* are highly revered for their ability to treat general skin diseases. A paste formed by crushing the seed or tuber is applied directly to the skin and is said to possess antibacterial and antifungal properties. A decoction of the plant is also used to lessen labour pain and to induce an abortion. The root of *Xysmalobium undulatum* is crushed and then, when mixed in water, forms a paste. The paste is then repeatedly applied directly to open sores and wounds over three to five days. The crushed bark of *Acacia leucophloea* is made into a paste and used to treat skin diseases but decoctions can also be drunk to cure stomach complaints. The leaf poultices of *Withania somnifera* are often used for wound healing by external application to treat open wounds and cuts. Infusions of the root and the bark are also used to treat asthma. Poultices of the leaves and flowers of *Artemisa afra* are used extensively to treat a variety of skin diseases. Also, decoctions are consumed to aid in the treatment of headaches and colic. The sap of *aloe ferox* is considered to be highly important in the treatment of a variety of skin ailments and one of the most frequently prescribed species. Also, it can be used to treat arthritis, conjunctivitis, and stress. Together with many other *aloe* species, its use is wide-ranging and it is a highly revered species.

Based on the responses received it was determined that the majority of individuals made use of traditional medicines to treat skin diseases (Table 3). However, this investigation needs to be expanded in KwaZulu-Natal to include responses from other localities as well to get a better understanding of the prevalence and treatment of skin diseases in the province. Interestingly, this study contradicts previous case studies (Dlova *et al.*, 2018; Katibi *et al.*, 2016) that show dermatological complications account for less than ten percent of hospital visits in the KwaZulu-Natal interior. However, traditional medicine may play a significant role in ameliorating dermatological diseases, lessening the burden on provincial hospitals. It is interesting to note the number of individuals that were treated for stress-related complaints (Table 3) as the levels of this condition are arguably lower in a rural environment. However, living in a rural environment may be stressful due to a lack of necessities such as convenient access to water, electricity, and health facilities. The investigation revealed that heart disease is still low amongst rural communities when compared to urban dwellers. Skin diseases are common amongst both communities and there are more people seeking treatment for this condition than any other ailment. Skin diseases may be particularly prevalent in rural communities in South Africa due to their association with HIV infection. The problem is exacerbated by false traditional beliefs, particularly amongst rural communities, due to a lack of awareness and high illiteracy levels. The lack of HIV-prescribed treatments may be due to the socially stigmatised nature of the disease, with many dwellers fearing ridicule and victimisation.

Colds and flu are very common during the winter months where many shack dwellers are forced to take refuge in single dwelling types. The drop in winter temperatures compared to the summer months can lead to arthritis and backache which may severely affect the mobility of patients. It is interesting to note that treatment for heart disease and stress is low amongst rural dwellers compared to western societies, probably because poor communities live off the land and cannot afford processed and refined food that is so prevalent in urban cities. Sexually transmitted diseases are also very prevalent amongst rural dwellers and studies have shown that more than 70 percent of the population have one or more infections (WHO, 1999). Many plants have been used for the treatment of syphilis and gonorrhoea (Amabeoku *et al.*, 1998; De Wet *et al.*, 2012; Chinsebu, 2016). It must be borne in mind that sexually transmitted diseases can also spread between men, therefore, the prevalence amongst rural dwellers could be higher than those obtained in this study. Since employment opportunities for rural dwellers are scarce, most men seek employment in urban areas. In most instances, this increases promiscuous behaviour, resulting in a spike in sexually transmitted diseases. In this study, most of the traditional healers were women (75%) whilst the men were elderly (over 50 years) and could not seek traditional labor-intensive employment. The high degree of respiratory illnesses amongst poor communities may be correlated to their socioeconomic plight and lack of primary healthcare. Due to their isolation from modern health care facilities, many dwellers are forced to use traditional healers to cure respiratory complications which are particularly prevalent in young children. Gastrointestinal disorders may affect people who are forced to prepare meals when conditions are not hygienic. Lack of electricity and clean water may result in bacterial contamination which may lead to gastrointestinal disorders.

It was clear that although both communities lived apart, they were affected by similar health conditions. This study further emphasises the important role of traditional healers in rural South Africa and their continued reliance on medicinal plants. It is unlikely that this reliance will reduce, therefore, traditional healers must harvest this rich biodiversity sustainably to protect valuable plants. The extensive use of leaf material as traditional medicine was like a previous study that showed widespread use of this part to treat skin disease in southern Africa (Mabona and

Van Vuuren, 2013). The formation of a paste applied directly to the skin was a common technique used to treat skin conditions.

Certain problems were encountered during this study. Data capturing was a time-consuming process due to the varying levels of literacy among traditional healers. Data that was incorrectly transcribed by interpreters may be open to misinterpretation and observer bias. One alternative is to use recorders to capture audio transcripts which can later be transcribed by indigenous language experts at the university. This may save time and the costs involved in hiring various individuals to interpret and transcribe information. Although some people may be critical of the quantitative nature of this study, these findings are critical as they contribute to existing knowledge which may not be readily available should there be less generalisation of data. It's important to note that while traditional medicinal plants have been used for generations, their effectiveness may vary, and scientific research on their specific properties and uses is still ongoing. If you're considering using medicinal plants for skin diseases, it's always best to consult with a healthcare professional or a traditional healer who has experience in their usage. Future research should, therefore, focus on the traditional treatments involving existing as well as less documented species so that the medicinal properties of these species can be fully exploited.

Addressing the prevalence of skin diseases in rural communities requires a comprehensive approach involving various stakeholders. The following interventions and strategies can help improve the situation:

- **Health Education and Awareness:** Implementing targeted health education programs to raise awareness about proper hygiene practices, early recognition of skin diseases, and the importance of seeking medical care.
- **Improved Access to Healthcare Services:** Expanding healthcare infrastructure in rural areas by establishing mobile clinics, telemedicine services, and increasing the number of dermatologists and general practitioners in underserved regions.
- **Training and Capacity Building:** Providing training programs for healthcare workers and community health workers to enhance their knowledge and skills in diagnosing and managing skin diseases.
- **Environmental Interventions:** Improving sanitation facilities, promoting access to clean water, and implementing pest control measures to reduce the risk of skin infections and infestations.
- **Collaboration and Partnerships:** Facilitating collaboration between government agencies, non-profit organisations, and community leaders to develop sustainable interventions and allocate resources effectively.

Skin diseases pose a significant burden on rural communities, resulting from a combination of factors including limited access to healthcare services, poor hygiene practices, and environmental challenges. Addressing the prevalence of skin diseases in rural areas requires a multi-faceted approach, including improved healthcare access, targeted health education, and environmental interventions. By implementing these strategies, it is possible to reduce the burden of skin diseases, improve health outcomes, and mitigate the socioeconomic disparities experienced by rural communities. Medicinal plant utilisation has a long-standing history in the treatment of skin diseases, offering unique principles, therapeutic modalities, and approaches to specific conditions. While further research is needed to validate the efficacy and safety of traditional remedies, their use can provide additional options for individuals seeking alternative or complementary treatments. By integrating traditional medicine with modern healthcare systems, we can harness the wealth of knowledge and experience that traditional medicine offers to improve the management of skin diseases.

Conclusion

Traditionally harvested plants play an important role in treating the primary health care needs of rural dwellers in mid and northern KwaZulu-Natal. Skin diseases are common amongst rural community dwellers in KwaZulu-Natal, regardless of location, possibly due to their association with HIV infection. The plants used by traditional healers to treat various conditions are related to geographical distribution and abundance patterns. This investigation rebuked the commonly held perception that the Durban medicinal (muthi) market is a central hub for medicinal plant species which is then sold and traded at other localities within the province. The extensive use of leaf material, either boiled or crushed into a paste, was a commonly used technique to treat skin conditions. The gel-like leaf exudates of plants such as Aloe were commonly added to other plant material to make the traditional medicine more effective. It's important to note that while these medicinal plants have a long history of traditional use, scientific research on their effectiveness and safety is limited in some cases. If you're considering using medicinal plants for

skin diseases, it's recommended to consult with a healthcare professional or a qualified traditional healer who has experience with their usage. They can provide guidance on proper preparation, dosage, and potential interactions with any existing medications you may be taking.

The use of medicinal plants in skin disease treatment offers several potential benefits. Traditional remedies often have a holistic approach, addressing both the symptoms and underlying imbalances. They may also provide alternative options for individuals who cannot access or afford conventional medical care. Furthermore, traditional medicine systems have a wealth of accumulated knowledge, passed down through generations, that can offer insights into effective treatment approaches. However, challenges exist in the integration of traditional medicine with modern healthcare systems. The standardisation and quality control of herbal remedies can be a concern. Additionally, scientific research on phytomedicine treatments for skin diseases is often limited, which can hinder their acceptance in mainstream medical practice. Collaborative efforts between traditional medicine practitioners, researchers, and regulatory bodies are essential to bridge this gap.

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