Factors influencing the management of psoriasis at Nyeri County Referral Hospital, Kenya

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ABSTRACT
Psoriasis a common, chronic immune-mediated disease characterized by skin lesions ranging from minor localized patches to complete body coverage. Most people do not realize they have psoriasis until they start experiencing the complications that come with the condition. There are several types of psoriasis with the most common being plaque psoriasis which is associated with red and white scaly patches on the skin. In addition to being a skin disorder, psoriasis can negatively impact many organ systems and is associated with an increased risk of cardiovascular disease; some types of cancer and autoimmune diseases such as celiac disease and Cohn's disease. Although disease severity is minimally defined by body surface area (mild psoriasis affects less than 5% of the body’s surface area, moderate psoriasis affects 5% to 10%, while severe disease affects more than 10% body surface area). Lesion characteristics (for example, location and severity of erythema, scaling, induration and pruritus) impact on quality of life are also taken into account. The aim of this study was to determine the major factors influencing the management of psoriasis at Nyeri County Referral Hospital. The researcher employed descriptive cross-sectional study. This generated the various answers that this research sought. It also enabled the limited resources and time constraints to be used in maximum. The study was able to paint a picture of the current situation. Key information based on qualitative and quantitative designs was collected through questionnaires. The study adopted a cross-sectional study design to assess the influence of stress, light exposure, topical agents and comorbidities on psoriasis management. The target population (n=70) randomly selected were nurses working during day shift at Nyeri County Referral Hospital. Self administered questionnaires were used to collect data with a response rate of 90%. Most (60%) of the respondents think that the commonest type of stress is psychological, (20%) of the respondents think that it is physiological, while the remaining (20%) think that it is social. Most (88%) of the respondents believed that stress has a negative effect on the management of psoriasis, while the least (12%) said it did not have any negative effects. Further findings were that most (91%) of the respondents think that psoriasis is prevalent, while (8%) think that it is very prevalent. None of the respondents thought that psoriasis is scarce or very scarce. Inadequate resources were cited as the major challenge of stress management in psoriatic patients at (40%), while poor social support came second at (30%). Non-compliance was at third place with only (2%) of the respondents citing it as a challenge at managing psoriasis. Conclusion made was that stress, light exposure, topical agents and comorbidities are factors influencing the management of psoriasis at Nyeri county and referral hospital. These factors aggravate the psoriatic symptoms, delay healing or pose a challenge at managing psoriasis.

Key words: Psoriasis, stress, light exposure, topical agents.

INTRODUCTION
Psoriasis is a common, chronic immune-mediated disease characterized by skin lesions ranging from minor localized patches to complete body coverage (Melnikova, 2009). Most people do not even realize they have it until they start experiencing the complications that come with the condition (Langley et al., 2005). There are several types of psoriasis; most common is plaque psoriasis which is associated with red and white scaly patches on the skin.
In addition to being a skin disorder, psoriasis can negatively impact many organ systems and is associated with an increased risk of cardiovascular disease, some types of cancer and autoimmune diseases such as celiac disease and Crohn’s disease. Although disease severity is minimally defined by body surface area (mild psoriasis affects less than 5% of the body’s surface area, while moderate psoriasis affects 5 to 10% and severe disease affects more than 10% body surface area), lesion characteristics (for example, location and severity of erythema, scaling, induration and pruritus) and impact on quality of life are also taken into account.

Approximately one-third of patients with psoriasis have a first degree relative with the condition (Chandra et al., 2015). Research suggests a multi-factorial mode of inheritance. Many stressful physiologic and psychological events and environmental factors are associated with the onset and worsening of the condition. Direct skin trauma can trigger psoriasis (Koebner phenomenon). Streptococcal throat infection may also trigger the condition or exacerbate existing psoriasis. Human immunodeficiency virus (HIV) infection has not been shown to trigger psoriasis, but can intensify the existing disease (Namazi, 2004). As the infection progresses, psoriasis often worsens.

Other factors that include smoking, increases the risk of psoriasis and its severity. Obesity and alcohol use and abuse are also associated with psoriasis. These associations may not be causative; patients with psoriasis may be more susceptible to unhealthy behaviors that may affect the outcome of treatment (Abel et al., 2011). In light of this, various factors have been identified in order to ensure effective management of psoriasis and avoid its adverse effects.

**METHODOLOGY**

The target population includes all nurses in Nyeri County Referral Hospital. The hospital has a total of 240 Registered Nurses (Human resource records, 2016). The sample size was made up of 72 registered nurses working in Nyeri County Referral Hospital. This was 30% of the target population. The researcher issued questionnaires to the 72 respondents who met the inclusion criteria.

The researcher used simple random technique where the respondents meeting the inclusion criteria were identified. The researcher used this sampling technique because of time and resources. By use of this technique every member of the defined population had an equal chance of being selected in the study. The data was collected within one month.

The researcher employed descriptive cross-sectional study. This generated the various answers that this research sought. It also enabled the limited resources and time constrains to be used in maximum. The study was able to paint a picture of the current situation. Key information based on qualitative and quantitative designs was collected through a questionnaire.

**RESULTS**

**Is stress a major factor influencing the management of psoriasis at Nyeri county referral hospital?**

From the findings in this study, stress was found to influence the management of psoriasis at Nyeri county and referral hospital. This was because 88% of the respondents believed that stress had negative effects on the management of psoriasis, 91% cited stress in psoriatic patients as prevalent, while 60% of the respondents cited psychological stress as the commonest type. Majority (40%) of respondents said that stress was a major factor that influenced the management of psoriasis.

**Type of stress**

Figure 1 shows that psychological stress is common at 60%, while social and physiological stress occurred at the same prevalence of 20%. This is an indication that majority of the respondents agree that psychological stress negatively
Responses to the challenges of stress management in psoriatic patients

Figure 2 shows that inadequate resource as a major challenge in management of stress in psoriatic patients at 55% was followed by poor social support at 41% and patient non-compliance at 3%.

Light exposure

Table 1 show that 56% of the respondents agree that light exposure is good for the management of psoriasis, 42% agree that it is very good, while 3% agree that it is poor. Therefore, the relevance of patients exposing their skin to sunlight in the management of psoriasis cannot be ignored.

Topical agents

Table 2 shows all respondents agree that topical agents improve symptoms of psoriasis. The study therefore supports the use of topical agents as the mainstay management of psoriasis.

DISCUSSION

Most (60%) of the respondents think that the commonest type of stress is psychological, while (20%) of the respondents think that it is physiological and the remaining (20%) assume it is social. Most (88%) of the respondents were of the opinion that stress has a negative effect on the management of psoriasis, while the least (12%) alleged it did not have any negative effects. Further findings were that most (91%) of the respondents think that psoriasis is prevalent, while (8%) think that it is very prevalent. None of the respondents thought that psoriasis is scarce or very scarce. Inadequate resources were cited as the major challenge of stress management in psoriatic patients at (40%), while poor social support came second at (30%). Non-compliance was at third place with only (2%) of the respondents citing it as a challenge in stress management in psoriatic patients.

From the findings of the study, most (86%) of the
respondents assumed that they use light exposure during the management of psoriasis, while the least (13%) of the respondents believed that they did not. More than half (58%) of the respondents alleged light exposure is used often. The least (7%) of the respondents said that light is rarely used, while (35%) were of the opinion that it is sometimes used. The study further revealed that more than half (56%) of the respondents rated use of light exposure as very good, while 42% rated it as good and the least (3%) rated it as poor. The majority (86%) of respondents said that they gave specific instructions to the patients before and during the use of light exposure the use and (13%) of the respondents said they did not give any specific instructions.

It is also evident that (69%) of the respondents believed they use topical agents in the management of psoriasis, while (31%) of the respondents said they did not. Most (48%) of the respondents said that period of treatment using the topical agents was less than 6 months, (35%) of the respondents alleged they gave the treatment lifelong, while (14%) assumed that they administered the topical agents for one week and the least number (3%) of respondents said they administered it depending on various factors. Most respondents gave steroids as the common topical drug used. More than half (69%) the respondents said that use of topical agents had better results than other drugs, while (31%) said that the use of topical agents did not have better results than other drugs.

A significant percentage, that is, (92%) of the respondents said that patients develop or present comorbidities in psoriasis while the least number of respondents (8%) said that patients they did not present or develop comorbidities with psoriasis. The respondents cited metabolic disorders as the commonest (50%) comorbidity presented in psoriatic patients, musculoskeletal disorders at (10%), while the least HIV/AIDS at (7%) and cardiovascular disorders at (5%). Most of the respondents (40%) believed that comorbidities worsen psoriasis and (30%) assumed that they delay healing. None of the respondents said that comorbidities improve the symptoms of psoriasis.

**Conclusion**

It was drawn from the study that stress, light exposure, topical agents and comorbidities are factors influencing the management of psoriasis at Nyeri county and referral hospital. These factors aggravate the psoriatic symptoms, delay healing or pose a challenge at managing psoriasis.

**REFERENCES**


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