Perceived Self -Efficacy among Patients with Psoriasis

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Abstract
Skin diseases are very common. Psoriasis vulgaris is a common inflammatory and hyper-proliferative skin disease. Self-efficacy refers to the patients that they belief that he / she can carry out behaviour necessary to reach a desired goal, even when a situation contains unpredictable and stressful elements. The functional component that serves as boon to them is self-care management support. The objective of the study is to assess the perceived self- efficacy by using self- efficacy of managing chronic disease – 6 items. A descriptive cross-sectional study design was used where 168 patients with psoriasis were selected for the study using consecutive sampling. The result was highlighted that there was a high behaviour noted for their self- efficacy to care for themselves.

Introduction
Skin diseases are very common. Psoriasis vulgaris is a common inflammatory and hyper-proliferative skin disease which affects the visible part of the body. It is affecting about 2% of Americans. Approximate estimated cost for treatment is about $1, 6 billion to $3.2 billion annually. Different population with different prevalence varies from 0% to 11.8%. The aims of the support group are to reduce feelings of isolation and to enhance coping skills and self-efficacy [1].

Psoriasis patients showed a greater prevalence of childhood trauma and less resilience than persons without psoriasis [2]. Programs focusing on self-motivation and strengthening of self-efficacy should be taught to psoriasis patients. Physical, emotional, social well-being and also the sexual functioning are the major impact on patients with psoriasis [3]. Work disability occurs if psoriasis is untreated or inadequately treated [4]. Hence, it requires on-going psychosocial adjustment and behavioural change to deal with fluctuations, pain, restricted mobility and fatigue in daily life [5]. Self -care ability enhances the self-efficacy, compliance with therapeutic management thus helps in improving quality of life (QOL) in this chronic illness. Early screening for patients at risk for functional deficits, work disability, and psychological distress is important to provide early rehabilitation services. For many intervention studies, self-efficacy is a primary or secondary patient-reported outcome, or it may be an important mediator variable [6,7]. Self-efficacy is a major determinant of behaviour and behavioural change, and acts as a key mediator of the acquisition of self-management skills in chronic disease [8-10]. Both cross-sectional and longitudinal studies across a range of disease conditions have shown greater self-efficacy to be associated with better health outcomes and a greater sense of well-being.

Need For the Study
A longitudinal study - Norway correlated Self-efficacy with health status measures, showed that lower self-efficacy correlated with higher levels of Pain and Fatigue, Physical disability and Negative mood [11]. Self-efficacy has been positively associated with better health status outcomes in a range of conditions relevant to rehabilitation. With early identification of illness and appropriate medications help in reducing the symptoms. Living with the pain, stiffness, fatigue and higher levels of disease activity as well as side effects of the medication, can lead to more behaviours of depression, anxiety consequently lead to an increased risk of suicide [12].

Both patients and physicians are often frustrated with the chronic nature of psoriasis. Many barriers to effective self-management of psoriasis exist. Successful treatment requires the establishment of a strong doctor-patient relationship and patient empowerment in order to maximize adherence to a treatment regimen and improve outcomes primarily localized to the skin and joints [13]. Patients suffer from lifelong disease, characterized by a relapsing and remitting course of illness. In addition to suffering from physical symptoms, psoriatic patients are also significantly affected by psychosocial comorbidities, including depression, anxiety, and embarrassment [14]. Self-efficacy for Managing Chronic Conditions is defined as an individual's confidence in his/her ability to successfully perform specific tasks or behaviours related to one's health in a variety of situations".

Statement of the Study
A study to assess the perceived self- efficacy among patients with Psoriasis attending Dermatology Out-Patient department, Christian Medical College, Vellore.

Objective of the Study
1. To assess the perceived self-efficacy among patients with Psoriasis.
2. To find the association between perceived self-efficacy and the selected socio-demographic and clinical variables among patients with psoriasis.

Operational Definitions
Perceived Self-Efficacy
In this study it refers to the patient's belief about their capabilities to perform an activity that affects his/her lives as measured by the self-efficacy in managing chronic disease scale.

Psoriasis
In this study it refers to patients who are diagnosed by dermatologists as its type in Christian Medical College more than 6 weeks and attending dermatology outpatient department or admitted as inpatient area for further management.

Demographic Variables
Age, sex, gender, educational qualification, family members, occupation, locality, family income and religion.

Clinical variables
Medical diagnosis, duration of illness, Number of hospitalization, treatment prescribed and comorbidity

Methodology
Research Approach
A quantitative study

Research Design
The study was done by Non - experimental design –a cross sectional study

Setting
The study was conducted in Out Patient and inpatient area of Department of Dermatology, Venereology and Leprology in Christian Medical College, Vellore.

Population
Adult patient attending dermatology, venereology and Leprology and diagnosed by the dermatologist as Psoriasis vulgaris.

Sampling Technique
Consecutive sampling technique

Sample Size
168 with Psoriasis

Formula:

$$n = \frac{1.96^2 \; X \, P \, Q}{d^2}$$

Z = 1.96
P = 0.125
d = 5%

Single proportion – absolute precision

Expected proportion	= 0.125
Precision %	= 5
Desired confidence level (1-alpha) %	= 95
Required sample size	= 168

The required sample size of 168 is calculated using a formula for estimating the minimum sample size in descriptive heath studies and finding from a previous study. The minimum sample size is increased by 10% to take care of incomplete/nonresponse and refusals.

Selection of Samples
Inclusion Criteria: Patients who
1. Are eighteen years and above
2. Can read and comprehend Tamil, English or Hindi
3. Give consent to participate in the study
4. More than 6 weeks of time from the initial diagnosis

Exclusion Criteria: Patients who
1. Put forward any demand.
2. Pregnant women and children

Data Collection Instrument
It consists of two parts
Part I: Demographic variables and clinical variables
Part II: Self-reported questionnaires

Self-Efficacy in Managing Chronic Disease Scale
Responses are made on a 4 point scale. Sum up the responses to all 6 items to yield the final composite score with a range from 10-40. No recoding.

Data Collection Method
The investigator approached the medical record officer of that particular day and got the list of old patients in general and private dermatology OPD. The investigator had gone through the chart in computer to find out the medical diagnosis. Then the investigator introduced herself and co-investigator, gave information about the study, obtain the informed consent signed and collected the socio-demographic and clinical details from the patient according to the inclusion criteria, after making him/her comfortably sit in the discussion room. The recruited patients were requested by co-investigator to complete the self-report questionnaire-self efficacy in managing chronic disease-6 items as instructed, until they are called by the dermatologist. Then the co-investigator collected the questionnaire and analysis of the result was done using SPSS version 17 by the investigator.

Data Analysis
Statistical Analysis
For continuous and categorical data, the descriptive statistics n, Mean, SD and number of patients and percentage was presented. The number of participant and percentage was given to assess the perceived self-efficacy among patients with Psoriasis. The Chi-square test and also Fisher's exact test was applied to find association between demographic, clinical variables with outcome. All tests was two-sided at $\alpha=0.05$ level of significance. All analyses were done using Statistical Package for Social Services (SPSS) software Version 21.0 (Armonk, NY: IBM Corp).

Results

Table 1: Distribution of patients according to the socio-demographic variables

Particulars	Frequency	Percentage
Age (in years)		
18-40 yrs	74	44.0
41-60 yrs	76	45.2
>60 yrs	18	10.7
Sex		
Male	103	61.3
Female	65	38.7
Education Status		
Elementary	3	1.8
Primary	39	23.2
Secondary	69	41.1
Undergraduate	47	28.0
Post graduate	10	6.0
Occupation		
Employed	85	50.6
Unemployed	83	49.4
Locality		
Urban	90	53.6
Rural	78	46.4
Marital Status		
Single	26	15.5
Married	137	81.5
widow	5	3.0
Type of Family		
Joint	101	60.1
Nuclear	67	39.9
Religion		
Christian	17	10.1
Hindu	133	79.2
Muslim	18	10.7
Income: (in Rs)		
<5000	31	18.5
5000-10000	40	23.8
10001-20000	55	32.7
20001-30000	22	13.1
>30000	20	11.9

Inference

The above table highlights the distribution of subjects. 45.2% was in the age group of 41-60 years, 61.3% were male, 41.1% had done secondary education, 50.6% were employed, 53.6% are living in urban, 81.5% were married, 60.1% are in joint family, 79.2% were Hindu by religion and 32.7% were earning between Rs.10001-20000.

Table 2: Distribution of patients according to the clinical variables

Clinical variables: N=168

Particulars	Frequency	Percentage
Number of hospitalization		
1 time	45	26.8
2 times	8	4.8
3 times	6	3.6
>3 times	5	3.0
NIl	104	61.9
Treatment prescribed		
Medicated Bath	17	10.1
Topical application	130	77.4
Wet wrap therapy	14	8.3
Oral medicines	1	6
Nil	6	3.6
Diagnosis		
Psoriasis vulgaris	168	100.0
Comorbidity		
Diabetes Mellitus	45	26.8
Hypertension	25	14.9
Cardiac problems	3	1.8
Nil	95	56.5
Duration of Illness		
>6 weeks –m1 year	34	20.2
1-2 years	24	14.3
2-3 years	27	16.1
3-4 years	18	10.7
>5 years	65	38.7

Inference

The clinical details of the subjects in the above table depicts that the subjects with psoriasis who were not admitted in hospital are 61.9%, treated with topical application was 77.4%, medically diagnosed as psoriasis vulgaris were 100%, further majority of the sample did not have comorbidities were 56.5% and had illness for more than 5 years were 38.7%.
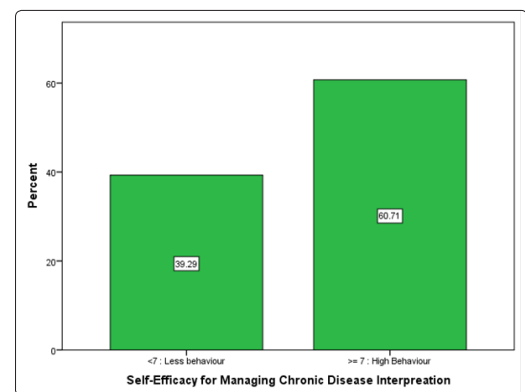

Figure 1: Distribution of patients according to the perceived self-efficacy

Psoriasis patients have high behaviour of 60.71% to take care of themselves

Results
60.71% of psoriasis patients have high behaviour to take care of themselves. There is no association between the perceived self-efficacy and the selected demographic and clinical variables.

Discussion
Patients must be empowered through gaining knowledge and seeking support for both the physical and psychosocial aspects of their disease. Topical therapy is essential in the self-management of psoriasis. For many patients, topical therapy significantly affects their daily routine because it is more complex and time-consuming than oral medications [15]. To improve treatment adherence and results, physicians can supply individualized written instructions with lay terms, simplify complex treatment regimens, and prescribe topical medications based on patient vehicle preference. Doctors can also schedule a follow-up visit soon after initiation of treatment and have patients focus on applying their medications in the time period between visits to reduce the perceived burden of sustained treatment [16]. Physicians' views and patients' views on the effectiveness of treatment may differ greatly. When evaluating the efficacy of treatment for psoriasis, physicians tend to emphasize physical criteria, such as clearance of lesions, whereas patients, in addition to physical criteria, assess efficacy based on subjective concerns, including alleviation of associated pain or itching [17]. Therefore, it is important to understand each patient's goal for therapy and develop a therapeutic strategy that aims to fulfil his or her expectations [18].

Conclusion
Efficacious self-management of psoriasis requires the willingness of both physicians and patients to do their parts in managing the disease. Physicians must establish good communication with their patients to address barriers to treatment adherence effectively. Patients must be empowered through gaining knowledge and seeking support for both the physical and psychosocial aspects of their disease. Through taking a multidimensional approach to psoriasis, successful self-management can be achieved.

The nurse has a pivotal role in monitoring self-efficacy by using standardized scales. She has to share information about the disease processes and teaches the interventions to help patients and their families. The patients are empowered with self-care skills. Hence, providing supportive care helps in improving the self-efficacy. She has to actively listens, reflects, and guides patients and their families through the stages of the flare ups – to mourn the loss of abilities and roles while also "instilling hope "to live a quality life.

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