

Knowledge, beliefs and perceptions of patients with acne attending skin clinics at National Hospital of Sri Lanka

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Abstract

Acne vulgaris is a common skin condition with even more common misconceptions and beliefs. Objective of this study was to evaluate the knowledge, beliefs, and perceptions of Sri Lankan acne patients about their understanding of acne pathogenesis, sources of information, and possible aggravating factors.

Study population consisted of all acne patients aged 15–25 years attending dermatology clinics at National Hospital of Sri Lanka for the first time, from June 2003 to November 2003. Hundred and fifty five patients were studied during the period of six months.

In my study 64.5% of patients had waited for more than one year before seeking medical attention for acne. Most frequently used applications were herbal preparations, cleansers and lotions. Decision to take treatment was mainly self made. Information on acne was obtained primarily from newspapers, but most believed it to be inadequate. On analysis of beliefs and aggravating factors, diet was mentioned as most frequent single causative factor. Fifty four percent patients believed that acne was curable with an anticipated treatment duration of less than six months by majority. Majority of patients mentioned that acne has none or mild impact on relationship with family (73.4%), friends (63%), work (61.1%), or school activities (71.6%). We conclude that fair amount of acne patients have inadequate knowledge about acne. There is a need for accessible, accurate, community-based education targeting teenage population to minimize delay in starting treatment and to eliminate misconceptions.

Introduction

Acne is a condition which usually begins in adolescence and often improves once early adulthood is reached. Acne of all grades is very common in young people with over 90% of males, and 80% of females being affected by the age of 21 years. It is a common inflammatory disease of pilosebaceous glands characterized by comedones, papules, pustules, nodules and cysts. Acne occurs predominantly on the face (99% sufferers) and to a lesser extent occurs on back (60%) and chest (15%). In United Kingdom approximately 3.3 million patients consult their general practitioners on account of their acne annually. Acne has peak incidence in late teens and early twenties, therefore has its impact

on a population in their working life and at a time when facial appearance is of paramount importance in present day life and employment.

A recent study of 111 acne patients aged 16 years and over attending a UK dermatology out-patient department found levels of social and emotional problems comparable with those in people with severe chronic disabling diseases such as arthritis and epilepsy.

Although there is a substantial literature on the basic science, clinical features, psychosocial impact, and treatment of acne, there is a paucity of information on the knowledge and understanding of patients with acne, about their condition. Such information can lead to development of awareness and educational programme to increase patient understanding of their illness.

Objective of this study is to evaluate the knowledge, beliefs, and perceptions of Sri Lankan acne patients about their understanding of acne pathogenesis, sources of information, and possible aggravating factors. It is important to estimate the magnitude of the problem in order to alert dermatologists and other care providers to improve patients care.

Methods

This was a descriptive study design to evaluate the knowledge, beliefs and perceptions of patients with acne attending skin clinics at National Hospital of Sri Lanka. Study was conducted in dermatology clinics at National Hospital of Sri Lanka. This is the largest and most prestigious state hospital in Sri Lanka.

Study population consisted of all acne patients aged 15–25 years attending dermatology clinics (Tuesday and Friday) at National Hospital of Sri Lanka for the first time, from June 2003 to November 2003. We studied 155 patients during the period of six months. Following inclusion and exclusion criteria were considered.

Acne patients who were diagnosed clinically, were included into the study only when they attended

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the clinic for the first time because of acne during study period of six months from June 2003 to November 2003. Only 15 – 25 years old patients at the time of consultation were enrolled in the study. The interviews were conducted only by the principal investigator who was working as a senior registrar in the same clinic. Study instrument for data collection was an interviewer administered questionnaire.

Patients who didn't give their consent to participate in the study were not included. Also Patients with other significant medical conditions and on long term regular medications which can affect acne (eg. steroids) were excluded. Patients with other dermatoses which can affect facial appearance (eg. vitiligo) were also excluded.

Data entering and analysis was done using EPINFO 2000 software statistical package.

Results

155 questionnaires were administered. Mean age of the patients was 21.1 years. 65 were male, and 90 were females. Majority had education beyond 6th standard in school. Forty percent of patients were not employed and 27% were engaged in trained or skilled work.

Hundred percent of patients had face involment, followed by back (50%) and chest (15%). Respondents had the following acne severity distribution. 38.1% had grade I, 45.8% had grade II, 12.9% had grade III, and 3.2% had grade IV acne. 64.5% of patients had waited for more than one year before seeking medical attention for acne. 17.4% had delay of six to twelve months, 6.45% waited three to six months.

Most respondents have used various products and preparations for acne before seeking treatment from skin clinic. Herbal preparations were tried by 82.6% patients followed by cleansers (31.6%) and lotions (23.2%). Over ninety percent participants believed acne prevalence in community is between 25% to 50%. Decision to take treatment was self made in 47.1% and parents were mentioned in the decision making by 26.5%, followed by friends (16.8%) and advertisements (7.7%).

Seventy nine respondents mentioned newspapers as their main source of information, followed by electronic media (64), parents (51), and friends (50). On analysis of beliefs and aggravating factors, diet was mentioned as most frequent single causative factor (24.5%). Other factors include hormones (18.1%), poor skin hygiene (9.0%), infections (9.0%) and genetics (8.4%).

Impact of acne

Patients were investigated to find out impact of acne on self image, interpersonal relationships with family, friends, work and school. Majority of patients mentioned that acne has none or mild impact on relationship with family (73.4%), friends (63%), work (61.1%), or school activities (71.6%). Majority of patients (82.4%) had mild to moderate impact on self image and 10.3% were affected severely. Only 5.2% had suicidal ideas because of acne.

Beliefs about treatment

Fifty four percent patients believed that acne was curable, 14.2% believed acne was incurable and 31.6% didn't know about the curability of acne. Ten percent of patients mentioned that acne is infectious and 49% used to pick acne lesions regularly. Patients believed acne treatment expected to work in less than two weeks (21.3%), less than 6 months (24.5%) and longer than 6 months (22.6%). Most preferred topical (47.4 %) treatment, and 33% had no preference.

Table 1. Products used for acne before seeking treatment

<i>Agents used</i>	<i>Frequency</i>	<i>Percentage</i>
Indigenous	128	82.60
Cleansers	49	31.60
Lotions	36	23.20
Facials	10	6.50
Acne cover ups	10	6.50
Other	17	11.00

Table 2. Sources of information about acne products used before the study

<i>Sources</i>	<i>Percentage</i>	<i>Frequency</i>
Friends	38.7	60
News paper	36.1	56
Parents	34.5	53
TV	23.2	36
Pharmacist	20.6	32
Doctor	18.7	29
Magazines	11.0	17
Internet	3.9	6
Other	3.2	5

Table 3. Factors believed to aggravate acne

Factor	Frequency	Percentage
Stress	98	63.20
Diet	96	61.90
Cosmetics	64	41.30
Sweating	43	27.70
Dirt	33	21.30
Premenstrual	27	17.40
Sunlight	26	16.80
Moisturizers	13	8.40
Heat	10	6.50
Shaving	7	4.50
Drugs	7	4.50
Smoking	5	3.20
Masturbation	5	3.20
Hair products	4	2.60
Other	7	4.50

Table 4. Factors believed to cause acne

Factor	Frequency	Percentage
Diet	38	24.5
Hormones	28	18.1
Skin hygiene	14	9.0
Infections	14	9.0
Inherited	13	8.4
Don't know	43	27.7
Other	13	8.4

Discussion

This report provides evidence to say that, significant amount of misbeliefs and misconceptions prevail among Sri Lankan acne population. There are few studies done on the beliefs and perceptions of patients on the causation, aggravating factors, and treatment in a referral population of patients with acne.

It is estimated that 45 million people in the United States have acne vulgaris. Although there is virtually no mortality associated with this disease, there is often significant physical and psychological morbidity⁷. In this study 83.6% had acne severity of grade I and II. Tan JKL et al⁸ noted different responses in a study

done in Canada where only 50% had acne severity of grade I and II, and 38% had grade III acne. There was no statistically significant association on severity of acne between males and females. Majority of patients has spent more than a year applying various cosmetics and herbal preparations. This delay in presentation may cause significant scarring which can be psychologically disturbing. Only 18% mentioned hormones as primary cause of acne and diet was mentioned as most frequent single causative factor 24.5%. Tan JKL⁸ study noted 64% patients citing hormones as a cause for acne, which shows the lack of awareness in our population. In a study in Nottingham UK by Smithard et al⁶ reported 25% young people gave lack of cleanliness as the main cause of acne. Only 11% blamed greasy food and 31% failed to identify a cause. Factors believed to aggravate acne were stress (63%), diet (62%), cosmetics (41%). Tan JKL et al⁸ noted some what similar findings in their study.

In this study main sources of acne information were newspapers (79) friends (50) electronic media (64), and parents (51). Ninety one percent believed that information they have about acne is inadequate. In community based study done in Australia by Kilkenny et al⁹ showed most frequently mentioned sources were television (74%), parents (61%), friends (47%) and magazines (39%). These results highlight the fact that major sources of information is coming from lay public and ordinary newspaper articles written by beauticians or alternate practitioners. There is a need for further education, both public and within schools about the nature of acne, causative factors and where to seek advice which may be of value. In this study 54% believed acne was curable, with 53% anticipating treatment to last less than 4 weeks. So we need to stress that acne lasts for many years so need longer duration of acne treatment.

Most preferred topical (47.4%) treatment, and 33% had no preference. There was no significant association with preference of male and female on treatment. It is also important to note that 51% used to pick acne, and need to address this, as this can cause scarring and hyperpigmentation on healing.

This study showed significant delay in seeking treatment. 65% acne patients waited more than one year before seeking proper medical attention. Large proportion of patients used various combination of indigenous medicines, lime, turmeric and fruits like avocado to treat acne. Unfortunately delay in starting proper treatment for acne has been shown to increase the risk of scarring⁸. These findings suggest the need for greater community awareness of acne, and its miserable consequences, and availability of very effective treatments, which can prevent scarring if treated early.

Of the 155 patients examined 150 had used one or more products to treat their acne. In addition information was collected with regard to whether treatment had been sought before for acne, and from whom. Family and friends were the main sources of advice on treatment. A total of 24 products had been used. Many were general (non specific) products and consist of Alternate medicines, cleansers, soaps, and various anti acne creams.

These were mainly recommended by Friends (38%), Newspapers (36%), Parents (35%), and Television (23%). Doctors contribution is only 18% which is almost similar to findings of Kilkenny et al⁹.

Almost all patients reported that having acne spots/pimples interfered with their daily social life, social events, relationships with members of the family, or with friends. About 5% reported having suicidal ideas. This percentage of people with death wish are very significant. Gupta et al¹⁰ described 16 cases of completed suicide among dermatology patients. Seven of the 16 patients who had committed suicide had troublesome acne. Same study has revealed acne and psoriasis are associated with higher depression scores than alopecia areata and atopic dermatitis. Of those who perceived their acne to be a problem with self image, 40.6% classified their problem as minimal, 41.9% as moderate and 10.3% as severe. In a study of 180 patients Layton, Seukeran, and Cunliffe¹¹ observed a correlation between psychosocial impact as measured by the assessment of psychosocial and social effects of acne score and facial acne grade. There is a necessity for accurate, community-based education on the natural history of acne, pathogenesis, risk of sequelae and delay in stating treatment. Also we need to send the message that acne is one of the easiest of the persistent skin conditions to treat, but must be treated sooner rather than later. It is also important to tell the patients not to give up treatment since doctors can now offer therapies which can guarantee a satisfactory result in virtually everyone (eg: Isotretinoin).

In summary this study has shown that acne is associated with fair amount of wrong beliefs and perceived by many as a cause of some psychological morbidity.

We conclude that fair amount of acne patients had inadequate knowledge about acne. This study showed the fact that there is a long delay in seeking attention for acne. To minimize this, we should educate teenage population via newspapers, TV etc. and have acne educational activities targeting teenage population. As there is fair amount of psychological

effect on patients due to acne, clinicians should be prepared to address the impact of acne has on life quality, and pay special attention to psychological morbidity.

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