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AN EPIDEMIOLOGICAL STUDY ON "ACNE" IN DIFFERENT AGE GROUPS OF WOMEN IN AND AROUND DWARAKA THIRUMALA, WEST GODAVARI DISTRICT, A.P.

R. Indira*[1], N. Lakshmi Prasanna[2], D. Alekhya[3] and M. Jaha Begum Shaik[4]

[1]Associate Professor, Ch. S.D. St. Theresa's College for Women(A), Eluru.
[2,4]Assistant Professors, Ch. S.D. St. Theresa's College for Women(A), Eluru.
[3]Intern, Maharaja Institute of Medical Sciences, Vizianagaram.

***Corresponding Author: Dr. R. Indira**
Associate Professor, Ch. S.D. St. Theresa's College for Women(A), Eluru.

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ABSTRACT
A cross-sectional, community-based study was performed to determine the prevalence and severity of acne vulgaris in women and of factors influencing the acne severity risk. The presence of acne was clinically determined and the secondary outcome measures of family acne history and the relation of acne to nutrition habits, emotional stress, menstruation were recorded in a questionnaire. Acne severity risk increased with the number of family members with acne history. This study was conducted to understand the causes, symptoms and treatment of the condition, to create awareness among the girls and to learn how acne can be managed.

KEYWORDS: Acne vulgaris, severity risk, menstruation.

INTRODUCTION
"Acne" occurs most commonly during adolescence, and often continues into adulthood. In adolescence, acne is usually caused by an increase in testosterone. Which people of both genders accrue during puberty for most people, acne diminishes overtime and tends to disappear or decrease after one reaches early twenties. However, there is no way to predict how long it will take to disappear entirely and some individuals will carry this condition well into their thirties, forties and beyond. Acne vulgaris is a distressing condition that affects the majority of adolescents, but its impact on mental health in this age group is poorly understood. (Smithard et.al, 2001).

Review of Literature
The integument or skin is the largest organ of the body making up 16% of body weight with a surface area of 1.8 m2. It has several functions. The most important being to form a physical barrier to the environment, allowing and limiting the inward and outward passage of water, electrolytes and various substances, while providing protection against micro organisms, ultraviolet radiation toxic agents and mechanical insults. There are three structural layers to the skin: the epidermis, the dermis and subsists. Hair, nails, sebaceous, sweat and apocrine glands are regarded as derivatives of skin. Skin is a dynamic organ in a constant state of change, as cells of the outer layers are continuously shed and replaced by inner cells moving up to the surface.

Acne vulgaris (or Acne) is a common human skin disease. The term "Acne rosea" is a synonym for 'rosacea', however some individuals may have almost no acne comedones associated with their rosacea and prefer therefore the term rosacea. 'chlorance' is associated with exposure to 'polyhalogenated' compounds.

Signs and symptoms-Typical features of acne include: seborrhea (scaly red skin), 'comedones' (black heads and white heads), 'papules' (pinheads), postules (pimples), nodules (large papules) and possibly scarring. It presents somewhat differently in people with dark skin. Physical acne scars are of different types-Ice pick scars, Box car scars, Rolling scars, Hypertrophic scars and pigmentation. Causes are Blockages in follicles, Hyper keratinization, Formation of a plug of 'keratin' and 'sebum', Enlargement of sebaceous glands, Increase in sebum production with increased 'androgen'. Hormonal activity, such as 'menstrual cycles' and 'puberty' may contribute to the formation of acne. During puberty, an increase in male sex hormones called androgens cause the follicular glands to grow larger and make more sebum. In adult women, Pregnancy and disorders such as 'polycystic ovary syndrome' or the rare 'cushings syndrome'. The lack of estradiol triggers acne known as acne climacterica. Genetic causes- The tendency to

develop acne runs in families. For example school aged boys with acne often have other members in their family with acne. Psychological- Acne severity is significantly associated with increased stress levels and also due to Infectious Propioni bacterium and a high 'glycemic load' diet. Management include Medications like Benzoyl peroxide, Commonly used antibiotics, either applied topically or taken orally, include 'erythromycin', 'clindamycin', and 'tetracyclines' such as 'minocycline', hormonal treatment ' Topical retinoids, Oral retinoids and Anti-inflammatories. 'Dermabrasion' is a 'cosmetic' medical procedure in which the surface of the 'skin' is removed by abrasion (sanding). Phototherapy, Photodynamic therapy and Laser treatment. 'Ayurveda' can be followed using herbs such as 'Aloe vera', 'Neem' 'Haldi' (Turmeric) and 'papaya'.

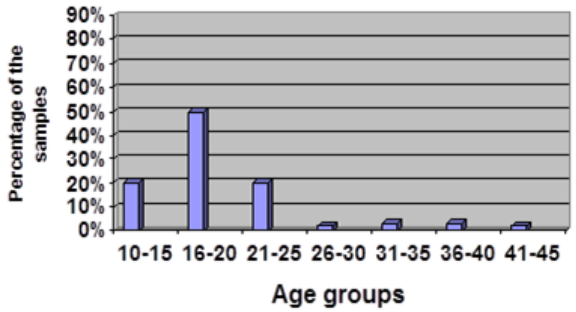
MATERIALS AND METHODS

To know more about acne, a survey method was followed. The data is collected from and near by villages of Dwarka thirumala, The data is collected from members of different age groups and the results are tabulated.

RESULTS AND DISCUSSION

Table i: Acne in Different Age Groups.

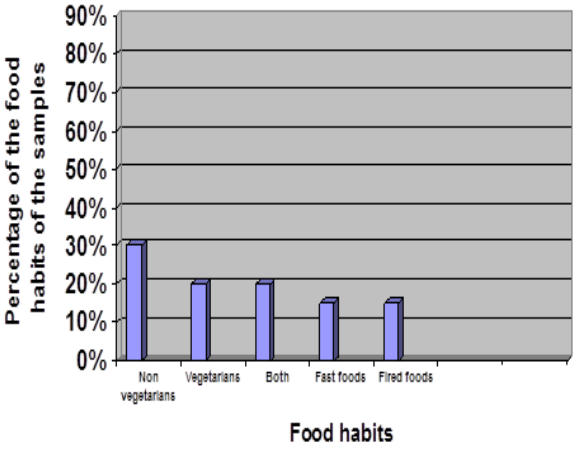
S.No	Age group	Percentage of the samples
1	10-15	20
2	16-20	50
3	21-25	20
4	26-30	2
5	31-35	3
6	36-40	3
7	41-45	2



Graph- i.

Table ii: Food Habits of The Subjects.

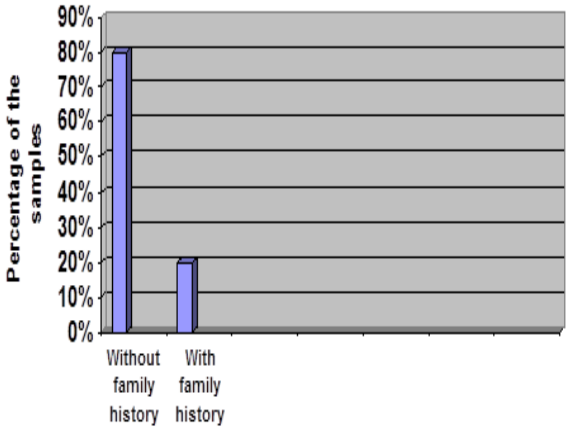
S.No	Food habits	Percentage of the samples
1	Non vegetarians	30
2	Vegetarians	20
3	Both (veg and Non-veg)	20
4	Fast foods	15
5	Fried foods	15



Graph – ii.

Table iii: Familial History.

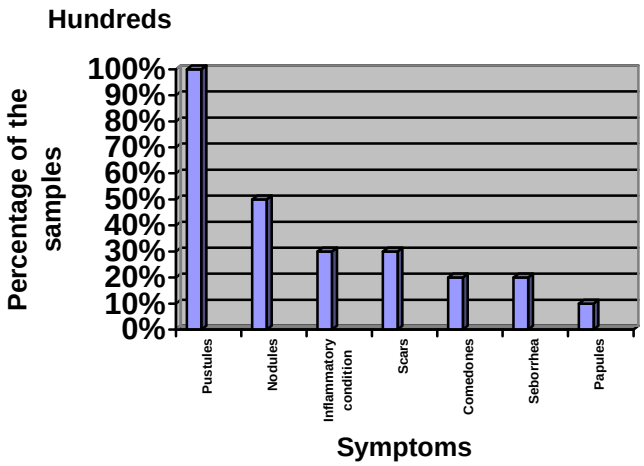
S.No	Family history	Percentage of the samples
1	Without family history	80
2	With family history	20



Graph - iii

Table iv: Symptoms of Acne.

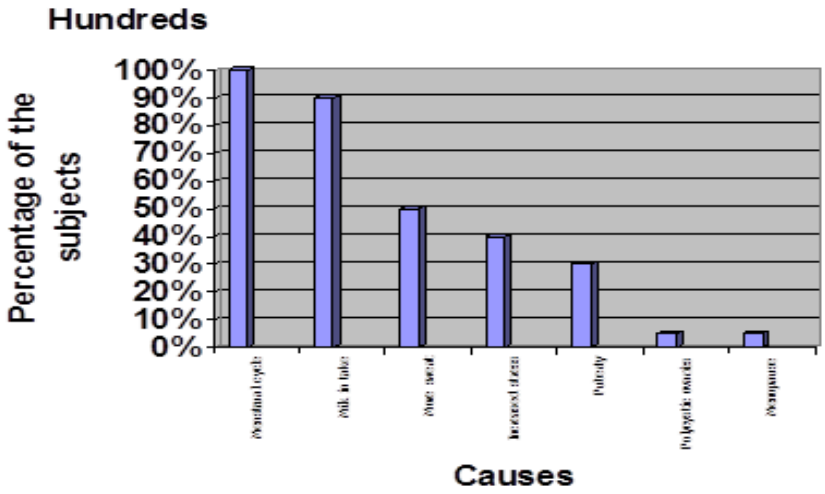
S.No	Symptoms of Acne	Percentage of the samples
1	Pustules (pimples)	100
2	Nodules (large papules)	50
3	Inflammatory condition	30
4	Scars	30
5	Comedones (black and white heads)	20
6	Seborrhea (scaly red skin)	20
7	Papules(pin heads)	10



Graph – iv.

Table – v. Causes of acne.

S.No	Causes of acne	Percentage of the subjects
1	Menstrual cycle	100
2	Milk in take	90
3	More sweat (more sebaceous glands)	50
4	Increased stress	40
5	Puberty	30
6	Polycystic ovaries	5
7	Menopause	5



Graph – V.

DISCUSSION

Table. i shows that 10-15 age groups are 20%, 16-20% age groups are 50%, 21-25 age groups are 20%, 26-30 age groups are 2%, 31-35age groups are 3%, 36-40 age groups are 3%, 41-45 age groups are 2%. In table. ii, It is observed that 20% are vegetarians, 30% are Non vegetarian, 20% are both (vegetarian & Non vegetarian), 15% prefer fast foods,15% prefer fried foods, The persons taking fast foods, fried foods, and other oily foods are suffering from severe acne. Table. iii shows that 20% are with faming history, 80% are without family history. In our study, familial history of acne was significantly more common in patients with moderate to severe acne than in patients with mild disease, a finding that is compatible with previous reports (Goulden et al., 1999; Dreno and Poli, 2003; Evans et al., 2005; Zahra et.al, 2009). In table. iv It is observed that 100% are suffering from pustules (pimples), 50% are having nodules (large papules), 30% are suffering from inflammation, 30% are having scars, 20% are having comedones (black heads & white heads), 20% are having scaly red skin (seborrhea), 10% are having papules (pin

heads). Table-v shows that In 100% of the subjects, acne increased during menstrual cycle. In 90% of the subjects, acne increased during milk in take. In 50% of the subjects, acne increased during more sweat (more sebaceous glands). In 40% of the subjects, acne increased during increased stress. In 30% of the subjects, acne increased during puberty. In 5% of the subjects, acne increased because of polycystic ovaries. In 5% of the subjects, acne increased during menopause. A premenstrual flare and stress was recorded as causing acne in 78% and 50%, respectively (Poli et.al, 2005).

CONCLUSION

Human body is the mirror of one's personality. It is a remarkable wonder of nature. The human body, like a machine, has to be oiled & maintained properly for a long running. Special care needs to be taken of all parts of the body.

Scientific research indicates that increased acne severity is significantly associated with increased stress levels. The national institute of health (USA) also proved 'stress as a factor that can cause an acne flare (more). A study of adolescents in Singapore observed a statistically significant positive correlation between stress levels and severity of acne. Beauty is a gift that nature has given to women. Real beauty and health are like two sides of the same coin. The ill effects of using artificial cosmetics are bound to appear sooner or later. Where as traditional system enhances the beauty and health of an individual in the natural and harmless way. There is a need for all students to have access to appropriate information and health services so that the social and psychological consequences of acne are minimized (Pearl et.al, 1998).

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