



# ”Face the failures until the failure fails to face you” Swami Vivekananda

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## CHAPTER - 1

### INTRODUCTION

#### INTRODUCTION

##### Background of the study

Health is very important for every individual, and it is also very important to maintain and restore normal healthy life. Healthy human body contributes to maintain normal mental and physical activity, where as illness refers to any deviation of the normal physical and mental health. Period of life illness can occur through many factors such as biological, psychological and environmental factors which may affect any system of body<sup>1</sup>

According to WHO "Health is a state of complete, physical, mental and social well being and not merely an absence of disease or infirmity" Health is very important for every individual, and it is also very important to maintain and restore normal healthy life. Healthy human body contributes to maintain normal mental and physical activity, where as illness refers to any deviation of the normal physical and mental health. Period of life illness can occur through many factors such as biological, psychological and environmental factors which may affect any system of body<sup>2</sup>

The term acne derives from the Greek word 'acme' from the writings of Actius Amidennus, he use this term "acme" in the sense of skin eruption" and vulgaris indicate the meaning "common" Acne. Vulgaris or common acne is the most experienced acne among teenagers.<sup>3</sup>

Acne vulgaris is commonly called as pimples and symptoms include presence of open and closed comedones, pus pockets, raised red areas of skin, pustular lesions most commonly on face, neck, back and chest. Apart from these, pain, soreness, itching and scarring may occur overtime and the condition may worsen before menses due to hormonal changes.<sup>4</sup>

Acne is common skin disorder of the oil glands when overactive sebaceous (oil) glands secrete too much oil (sebum) in the skin which leads to the plugged pores and outbreaks of lesions called Pimples/zits. This is characterized by the recurring formation of blackheads, white heads and pimples. Acne lesion occurs primarily on the face and sometimes on the back, shoulders, chest and arms. The incidence of acne is greatest during puberty, adolescence, and when hormones influencing the secretion of oil glands are at their peak level of activity such as during stress, emotional problems, menstruation menopause and exercising.<sup>5</sup>

Acne affects approximately 95% of the population at some point during their lifetime. This common disorder can range from mild to severe forms, cause sometimes extensive scarring, and can last well into the fourth and fifth decades. Effective therapeutic agents are available to both treat acne and prevent ongoing disease. Despite this, dermatologists frequently see patients with significant acne scarring because many patients delay seeking medical attention for acne and many practitioners procrastinate over using effective anti scarring options. In patients who already demonstrate scarring, repeated courses of antibiotics only result in recurring acne and additional scarring.

This, in turn, exacerbates the despair and other adverse psychosocial effects of the disease. Child Health Nursing concerned with the Health of infants, children & Adolescents, their growth & Development & their opportunity to achieve full potential as adult. Health problems of children & adolescent are very widely among the nations of the world depending upon number of factors, like their age, sex, pubertal changes & their life style & habits. These factors include prevalence and ecology of infections agent and their hosts, climate and geography, agricultural practices, educational, economic, social & cultural considerate & many instance give frequencies for some disorders<sup>6</sup>

Adolescent is a period of transition between childhood and adulthood- a time of rapid physical, cognitive, social & emotional maturing as the boy prepares for manhood and the girl prepares for woman hood. The precise boundaries of adolescence are difficult to define, but this period is customarily viewed as beginning with the gradual appearance of secondary sex characteristics at about 14 to 19 and ending with 18 to 20 years.<sup>7</sup>

The physical changes of puberty are primarily the result of Hormonal activity under the influence of the central nervous system. The hormonal influences during puberty cause accelerating in growth & maturation of the skin & its structure appendages. Sebaceous glands become extremely active at this time. This increased activity and the structural nature of common problem & puberty: (acne).<sup>8</sup>

Adolescents are continually comparing themselves with their peers and making Judgements about their own normality. Pubertal children feel most comfortable when they are just like their friends and age mates, unfortunately, this is also the time when the hormonal effect of the sebaceous glands produce acne, which

creates problems for many youngsters. To the adolescent even the most insignificant pimple may be viewed as a gross disfigurement.<sup>9</sup>

Acne vulgaris is most commonly occurs during adolescence and often continues into adulthood in adolescence, acne is usually caused by an increase in male sex hormones, which people of both genders accrue during puberty.<sup>10</sup>

Although acne is most prevalent in this age group, since acne vulgarism occurs mostly on face, the impairment of self-image & self-esteem, clinical depression, social phobia & anxiety factors have been associated with it. Acne is more prevalent in males than in females. Acne affects emotional health in both genders. The psychological morbidity is complex among adolescent. The cause of acne is multifunctional, predisposing factors include heredity; hormonal contraceptives, androgen stimulates, certain drugs, including corticosteroids, other possible factors are exposure to Heavy oils, greases, rubbing from light clothing, cosmetics, emotional stress; and unfavorable climate<sup>26</sup> Approximately, one third of all female adolescents experience an increase in papules or pustules in the week preceding menstrual cycle. Although Acne is self-limiting, it is a source of persistent embarrassment, disgust and stress for the adolescent.<sup>11</sup>

Prevention & appropriate management of acne vulgaris is very important during adolescent period. Depression is the two to three times more prevalent in acne vulgaris patients than in the general population. Improvement of the adolescent's overall health status is part of the general management adequate rest, moderate exercise, a well-balanced diet, reduction of emotional stress, are part of general health promotion. Gentle cleansing with a mild cleanser once or twice daily is usually sufficient. Antibacterial soaps, topical agents are use to drying the acne. Acne on the forehead may improve with brushing, the hair away from the forehead.<sup>12</sup>

Some form of light therapy were of short terms benefit patients may find it easier to comply with there treatments, despite the initial discomfort, because of their short duration

Systemic antibiotic therapy is used when moderate to severe acne does not respond to topical treatments, oral antibiotics are considered safe to use treatment acne<sup>13</sup>

Acne vulgaris is a common follicular disorder affecting susceptible hair follicles, most commonly found on the face, neck and upper trunk. It is nothing but a disorder involving sebaceous glands and hair follicles. Acne is the result of clogging of sebaceous glands leading to the formation of pimples and cysts. Acne is the most commonly encountered skin condition in adolescents and young adults between ages of 12 and 35 years. Both genders are affected equally, onset is slightly earlier for girls.<sup>14</sup>

Research has shown that genetic also play a role in Acne Vulgaris besides from scarring, its main effects are psychological such as reduced self – esteem, depression or suicide. Acne usually appears during adolescence, when people already tend to the most socially insecure. Early and aggressive treatment is therefore advocated. They may drop out of schools and social activities, and even avoid facing people, because they feel Acne has disfigured them. Thus, acne can stunt a child's professional and social growth. It affects more than 85% of teenager to a varying degree.<sup>15</sup>

Proper skin care can prevent dermatological disease and can enhance the beauty. A good and healthy skin is always essential for the proper development of all faculties of the individual.<sup>18</sup> Nearly, 17 million people in the United States have acne, making it the most common skin disease. Although, acne is not a serious health threat, severe acne can lead to disfiguring<sup>16</sup>

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## NEED OF STUDY

Acne vulgaris is the most common skin problem, during adolescence. Acne involves anatomic, physiologic, biochemical, genetic, immunologic & psychological factors. A useful study of the incidence showed that Acne affects 95-100% of adolescent boys and 83-95% of adolescent girls.<sup>1</sup> In world wide statistics when we take every year approximately 1 in 16 or 6.25% or 17 million people get affected by acne of people 13-19 years of age<sup>18</sup>

It is estimated that acne affects 40 to 50 million people in the united states (16%), and approximately 3 to 5 million in Australia (23%). Acne vulgaris exhibits a worldwide prevalence of up to 95% among adolescents.<sup>19</sup>

An article, introduce to Does diet Really affect Acne ? Reported that cow's milk intake increased acne prevalence and severity. Furthermore, prospective studies demonstrated a positive associate b/w a high-glycemic load diet, hormonal mediators and acne risk. The prevalence of acne in adolescents has been reported as being b/w 35% and 90% depending on the method of classification, with peak incidence occurring at b/w 14 & 17 years in females and 16 & 18 years in males.<sup>20</sup>

Although acne is most prevalent in this age group, since acne vulgarism occurs mostly on face, the impairment of self image & self esteem, clinical depression; social phobia & anxiety factors have been associated with it. Acne is more prevalent in males than in females. Acne affect emotional health in both genders. The psychological morbidity is complex among adolescent. The cause of acne is multifunctional, Predisposing factors include heredity; hormonal contraceptives, androgen stimulates, certain drugs, including corticosteroids, other possible factors are exposure to Heavy oils, greases, rubbing from light clothing, cosmetics, emotional stress; and unfavorable climate.<sup>21</sup>

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Seventeen million Americans or 85% of people 12-24 years of age affecting with acne. Whereas, Canada has least prevalence (2, 081, 742 million) compared to USA. While Indians are moderately having acne approximately 66, 566, 912 million<sup>22</sup>

Kilkenny M, Merliss K, Plasket S, Marks R ( 1998 ) conducted a study on the prevalence of common skin conditions in Australian School student; acne vulgaris. They accessed by a randomized sample of 2491 students (aged 4-18 yrs) throughout the State of Victoria in Australia. The prevalence rate between the age group of 16-18 was 95% (c 189.6-96-9). This result shows that acne is a common problem especially adolescents<sup>23</sup>

Tan, H. H, Tan, A.W, Barkhan T, Yas X.Y, Zbum ( 2007 ) done a community based study of acne vulgaris among adolescents aged 13-19 years. In this cross sectional study 88% of teenagers themselves reported as having acne out of 1045 participants.<sup>24</sup>

Today society has a long standing prejudice against skin disease that need to be dispelled. Historically, skin disease has been perceived as divine punishment for being spiritually and physically unclean. Subtle punishment of skin disease still exists because of ignorance, so, it became as urgent need to provide accessible and accurate health education or structured teaching programme to change their beliefs and attitudes<sup>25</sup>

Al-Hoquail, I. A, (2001) revealed a study on knowledge, beliefs and through the help of questionnaire. This study vehemently pointed out that misconception and false beliefs on acne are wide spread and enduring among the youth. Health education programme on acne is needed to improve their understanding of the conditions<sup>26</sup>

Al Robaee, (2005) as conducted a study on prevalence, knowledge beliefs and psychosocial impact of acne in university students in central Saudi Arabia. The sample size was 717 students and chi-.square test was used. At last, the researchers found that health education is necessary to improve their knowledge as well as change their beliefs and misconcepts about acne<sup>27</sup>

Even though relevant scientific researches discuss potential effect of acne beyond its dermatological manifestation. It includes effect on psychiatric health, psychological well being and quality of life. Acne has been implicated psychiatric and psychological process more than other dermatological conditions and they report greater level of anxiety and depression. In spite, feelings of embarrassment, shame, guilt, social phobia can develop secondary to acne vulgaris.

The University of Western Ontario's Department of psychiatry done a recent study on depression among 480 patients with dermatological disorders. They found that 5.6% of patients with non cystic facial acne had suicidal ideation.<sup>28</sup>

Karaoha C I, Taylor, Gol, Anctor J, et al.( 2004 ) conducted a study on demographic features, beliefs and socio psychological impact of acne vulgaris among its suffers in two town in Nigeria. The sample size was 174 facial acne suffers and used a self administered questionnaire some of them experienced psychological abnormalities included social inhabitation, depression and anxiety. At last, the researches came to the conclusion that they need to improve the understanding of the disorder in Nigeria through health education programme.<sup>29</sup>

The researcher from experience has observed that many adolescents suffer from acne vulgaris and association with their compilation. So the purpose of this study is to prevent the complication thus helping in creating awareness to reduce its incidence among adolescents to take appropriate measure to reduce acne vulgaris. When assessing acne, is not just a skin disease but wide spread and socially frustrating conditions. So it is important to take all embracing approach and examine carefully for both clinical and psychological effect of the disease process. Moreover people have to know the causes and prevention of acne. Exact cause of acne often unknown others include family or genetic history hormonal activity, inflammation, stress hyperactivity of sebaceous glands, any medicines and chemicals.

## PROBLEM STATEMENT

A descriptive study to assess the Knowledge regarding prevention of acne vulgaris among adolescents at selected govt. Model Girls Senior Secondary School PortMore at Shimla (H.P.). With the view to develop information booklet.

### OBJECTIVES:

- 1) To assess the Knowledge regarding prevention of Acne Vulgaris among the adolescents
- 2) To determine the association of knowledge with selected demographic variables
- 3) To develop an information booklet.

### HYPOTHESIS

(H<sub>1</sub>) There will be some knowledge regarding acne vulgaris among the adolescents.

(H<sub>2</sub>) There will be significant association of knowledge regarding prevention of acne vulgaris among adolescents with selected demographic variables.

### OPERATIONAL DEFINITIONS

**Knowledge:** It refers to the level of understanding and awareness of adolescents regarding prevention of acne vulgaris assessed by structured questionnaires

**Acne vulgaris:** It refers to a common inflammatory disorder of the sebaceous glands. It involves, anatomic, physiologic, biochemical genetic, immunological & psychologic factors. It characterized by inflammatory papules, pustules, nodules and cyst. etc.

**Adolescence:** Adolescents are the person in transitional phase of growth and development between childhood and adulthood persons.

### CONCEPTUAL FRAMEWORK

**Burns and grove (2003)** State that “strategy for expressing a framework of a study that diagrammatically shows the interrelation of concepts and statement.” Conceptualization provides a frame of references for research, education and practice. It directs research by pointing out solution to a practical problem.<sup>30</sup>

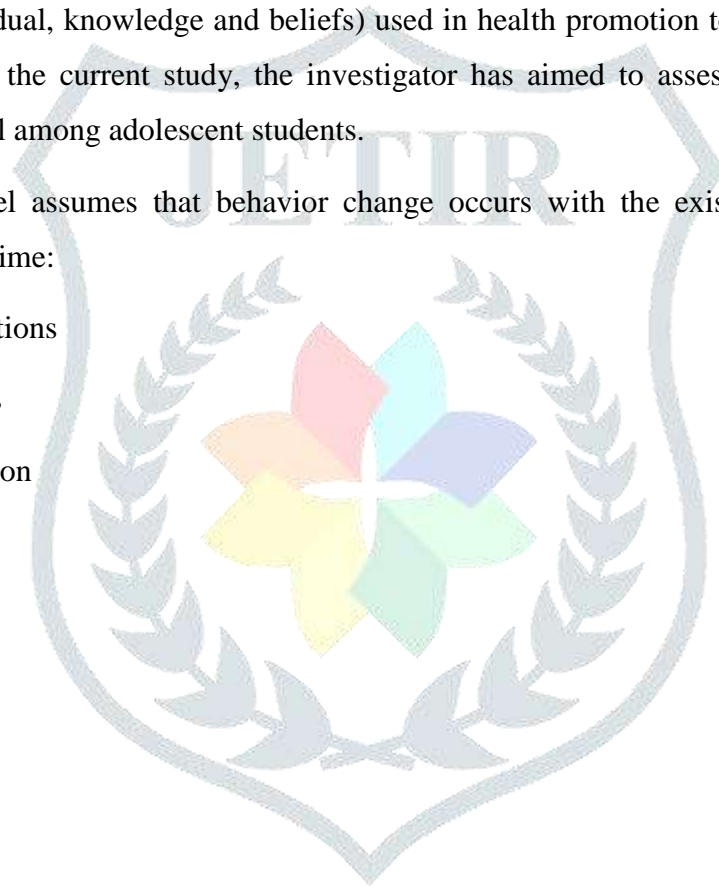
According to **POLIT and HUNGLER (1999)**, Conceptual framework represents a less formal and well developed attempt at organization of phenomenon than theory and deal with abstractions that are assemble by virtue of their relevance in the common theme.<sup>31</sup>

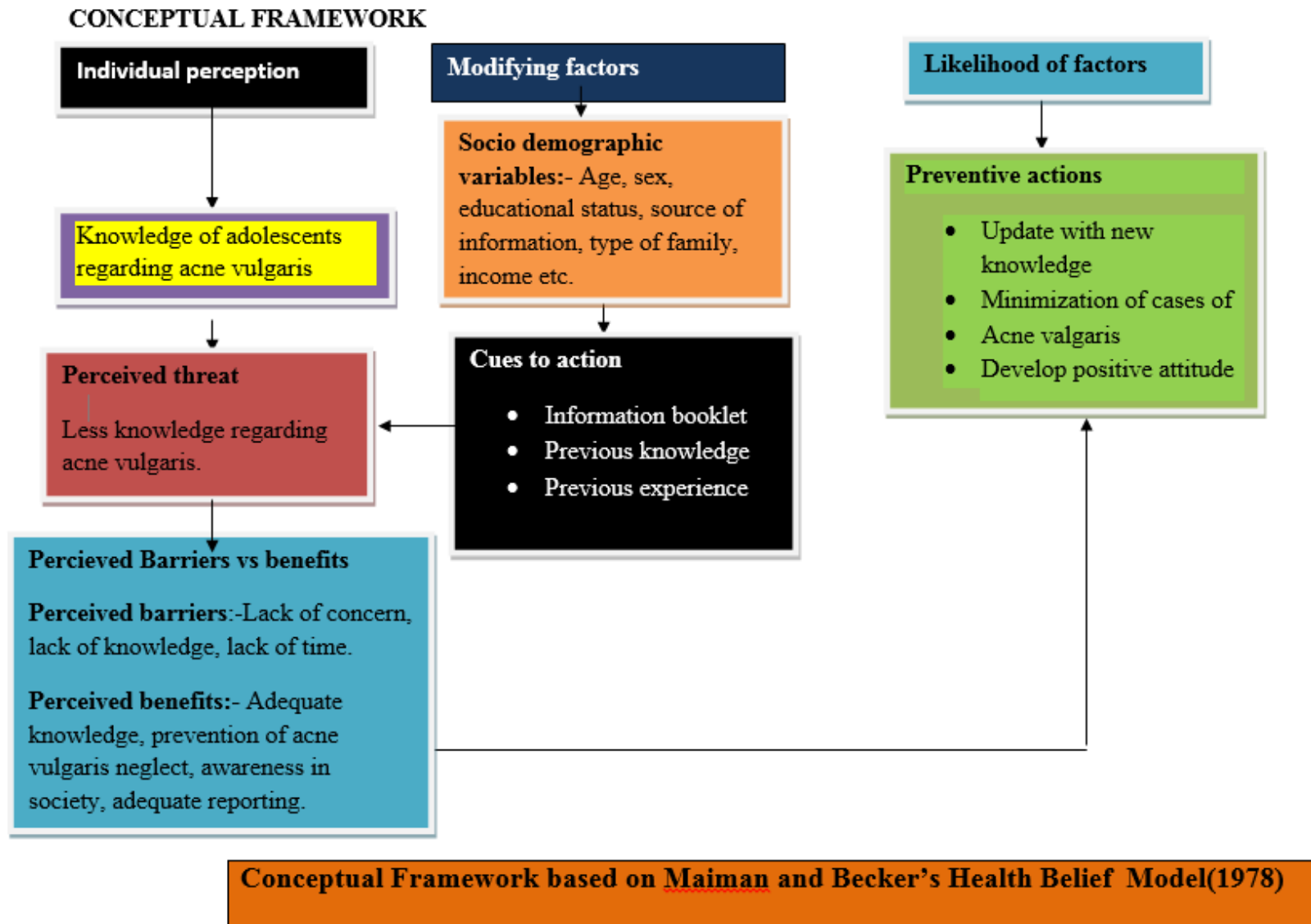
The purpose of conceptual framework is to provide logical, coherent structure through which phenomenon of concern can be understood and discussed. It provides broad perspectives for nursing practice, research and education. Conceptual framework plays several interrelated roles in the progress of science. Their overall purpose to is make science feeding meaningful and generalizable.

The conceptual framework for the present study was developed by using the concepts from Becker's Health Belief Model. The Health belief model was developed by Irwin M. Rosen stock in 1966 and was furthered by Becker and colleagues in the 1970s and 1980s. The Health Belief Model is an intrapersonal theory (within the individual, knowledge and beliefs) used in health promotion to design, intervention and prevention programs. In the current study, the investigator has aimed to assess the knowledge of Govt. Senior. Secondary School among adolescent students.

The Health Belief Model assumes that behavior change occurs with the existence of following three components at the same time:

1. Individual perceptions
2. Modifying factors
3. Likelihood of action







## DELIMITATIONS OF THE STUDY

- The study was delimited to:
- Adolescents
- Adolescent who were willing to participate

## ASSUMPTIONS

The study assumes that:

- Adolescents are aware regarding prevention of acne vulgaris
- Various factors like age and gender may influence to maintain prevention of acne vulgaris among adolescents

## SUMMARY

This chapter dealt with background of the study, need of the study, statement of problem, objectives, hypothesis, operational definitions conceptual framework, delimitation and assumption

## ORGANIZATION OF THE REPORT

The report of the study is organized in five chapter:

**Chapter 1:** This chapter dealt with the background of the study, need of the study, statement of problem, objectives of the study, hypothesis, operational definition, conceptual framework, and delimitation.

**Chapter11:** This chapter presents the related literature of review, a brief summary of the research and non research literature.

**Chapter 111:** This chapter deals with the methodology of the study, which includes research approach and design, setting of the study, population, sample and sampling technique, description of tool, its validity, try –out, reliability, pilot study, procedure for data collection and plan for data analysis.

**Chapter IV:** It present the analysis band interpretation of the data, major findings of the study, discussion and summary.

**Chapter V:** This chapter presents the summary of the findings, conclusions, implications, limitations and gives recommendation.

The fifth chapter is followed by a list of references and abstract.

## CHAPTER -II

### REVIEW OF LITERATURE

**Al-Natour (2017)** conducted a study on perceptions and beliefs of Saudi youth about acne. Three hundred twenty nine male students (aged 13–19 years) from 6 secondary schools in the eastern Saudi Arabia completed a self-reported questionnaire on knowledge about causation and exacerbating and relieving factors of acne. Over half (58.9%) of the participants considered acne as a transient condition not requiring therapy. Only 13.1% knew that the proper treatment of could take a long time, even several years. Over half (52%) thought acne could be treated with only one or a few visits to the doctor. Popular sources of information were television or radio (47.7%), friends (45.6%), and the internet (38%). Only 23.4% indicated school as a source of knowledge. Factors that participants thought caused acne included scratching (88.5%) and squeezing (82.1%) of pimples, poor hygiene (83.9%), poor dietary habits (71.5%), and stress (54.1%). Ameliorating factors reported included frequent washing of the face (52.9%), exercise (41.1%), sunbathing (24.1%), and drinking of mineral water (21%). The author concluded that misconceptions about acne are widespread among Saudi youth and should be addressed by a health education program. <sup>32</sup>

**Su et al.(2015)** conducted a study to found that the most common foods people thought were associated with acne were spicy or fried foods, whereas not many thought chocolate was a cause of acne. The majority of male students (62.5%) had poor knowledge about acne. Age, social status, living area of school were not significantly associated with the participants' level of knowledge. <sup>33</sup>

**E Bagatin – (2010)** conducted a study on prevalence of acne vulgaris. in students with Down syndrome. The article subjected to background of acne vulgaris exhibits a world wide prevalence of up to 95% among adolescence. A cross sectional study including 89 subjects aged between 10-18 years to verify acne vulgaris. The article concludes that A low prevalence of Acne in down syndrome, a predominance in males aged 13-19 and a facial comedonal are detect <sup>34</sup>

**M. Ramos-e-silva- (2009)** conducted study on assess of acne vulgaris. among adolescence. He conducted on the basis of organism that causes acne vulgaris among adolescence. It shows that unlike organisms, psychological squeals & Hormonal factors also incorporates the morbidity in mid adolescence. On average adolescence get 8 to 15 bacterial infection per year<sup>35</sup>

**G-Labiris-(2009)** conducted a study on Association between ISO tretinion use and central retinal vein occlusion in an adolescents. The study conducted on background of currently unknown pathogenesis with the objectives to Determine whether cow-glycemic-load-diet improves a lesion. The study conducted on 143 male having acne vulgaris aged between 13-19 years. The study conclude that, the Improvement in acne and insulin sensitivity after a low-glycemic load diet play a role in the pathogenesis of acne<sup>36</sup>

**Josephine Mbuagbaw (2007)** conducted a study to assess knowledge of reducing acne vulgaris among adolescents in secondary schools at Cameroon. To prepare the questionnaires over 100 adolescent students aged between 13-19 years. This study result indicate that knowledge of the students of adolescents play an important role in reducing acne vulgaris in adolescents who attended structure questionnaires knowledge.<sup>37</sup>

**Smithard A (2007)** conducted a study to determine the knowledge on educational material in improving the knowledge about acne vulgaris and psychological morbidity in mind adolescents. The study conducted on 317 students aged 13-19 participated from a comprehensive school in Nottingham. The study finding reveal that knowledge effect was amenable to a school based questionnaires knowledge and education have a considerable impact on emotional health in this age group<sup>38</sup>

**WU Tq- 2007** conducted a study on prevalence and risk factors of acne vulgaris among Chinese adolescents. The study finding suggests that the gender, age, diet, skin type, sleeping habits, & facial makeup are risk factors of severe a lesion, among adolescent. There for improving adolescent education could have significant effect on preventing acne vulgaris among adolescents<sup>39</sup>

**Xu S.X, Wang H.L, Fan X. et al. (2007)** conducted a study on the familial risk of acne vulgaris in Chinese Hans ethnic group. It was a case controlled study and he include volunteers of 975 acne cases and 580 controls. The final result said that the risk of acne vulgaris occurring in a relative of students of acne vulgaris was significantly greater than for the relative of an unaffected individual ratio 4.05, 95% confidence interval.<sup>40</sup>

**Huba A.T, Zawar, V, Wong, W.C.W, Lee, A. (2007)** conducted a study on the association of smoking and acne in men in Hong Kong and India. The setting was 3 primary care practices in Hong Kong and 1 primary care practice in India and used a retrospective case control study. They collected a data from 632 records of students with acne seen in the previous five years and they concluded that smoking is likely to bear a positive correlation with acne for men.<sup>41</sup>

**Wu T.Q, Mei S.Q, Zhing J.X et al.(2007)** conducted a study on the prevalence and risk factors of facial acne vulgaris among Chinese adolescents. The sample size was 3163 students between the age of 10 to 18 years from 7 schools and used self administered questionnaire and physician examinations. At last they found that significant risk factors of acne vulgaris included age, skin type, insufficient sleep and cosmetic make up use.<sup>42</sup>

**A cross sectional study was conducted (2007)** conducted a study on acne and related psychological health among 600 participants of high school students and the questionnaires consisted of General Health Questionnaire [GHQ] and Rosenberg Self-Esteem scale [RSES]. Finally they found the factors implicating the causes for acne were food, bad skin hygiene and hormones in increasing frequency.<sup>43</sup>

**Parker Magin, Dimity Pond, Wayne Smith, Alan Watson et al ( 2007)** conducted a study on a systematic review of the evidence for 'myths' and 'misconceptions' in acne management is diet, face washing and sunlight. Original studies were done by the searchers of the Medline EMBASE, Amed,

CINAHL, Cochrane and DARE data base. The result had shown little evidence exists for the efficacy or lack of efficacy for dietary factors, face washing and sunlight exposure in the management of acne.<sup>44</sup>

**Gil Yosipovitch, M. D et al.( 2007 )** conducted a study among the secondary school students in Singapore with the age of 14-19 years to understand the interplay between the factors that exacerbate acne and he used a 14 item, self questionnaire, and perceived stress. And 92% of the girls and 95% of the boys reported having acne. Finally he suggests that acne severity and stress has an association.<sup>45</sup>

**J.L. Burton (2006)** conducted a study on the prevalence of acne vulgaris in adolescence. The study conducted on the background of the acne vulgaris. is highly prevalent among young children and adolescence. The cohort study conducted of 1555 school children aged 8-18 and graded to the presence and severity of acne lesions. The study concludes that the incidence is more than 60% of acne vulgaris infection among young adults<sup>46</sup>

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