6.1 SUMMARY

It includes systematic activities carried out throughout the study. This particular study was done to assess the “effectiveness of sleep hygiene practices on sleep quality, psoriasis severity and activities of daily living.”

To achieve this investigator formed the objectives as follows:

1. Evaluate the effectiveness of sleep hygiene practices on quality of sleep among patients with psoriasis.

2. Determine the effectiveness of sleep hygiene practices on psoriasis severity among patients with psoriasis.

3. Assess the effectiveness of sleep hygiene practices on activities of daily living among patients with psoriasis.

4. Correlate the quality of sleep, psoriasis severity and activities of daily living.

5. Associate the selected background variables with quality of sleep, psoriasis severity and activities of daily living.
To answer the research questions the hypotheses formulated were as follows:

1. There will be a significant difference in the sleep quality among patients who practice the sleep hygiene practices than those who do not.

2. There will be a significant difference in psoriasis severity among patients who practice the sleep hygiene practices than those who do not.

3. There will be a significant difference in activities of daily living among patients who practice sleep hygiene practices than those who do not.

The investigator reviewed the literature to support the study in two parts.

Part- A : Related studies on psoriasis and sleep related studies

Part-B : Conceptual framework based on Weidenbach’s helping art of nursing theory.

The research approach used for the study was evaluative approach and randomized controlled trial design was adopted.

The study included sleep hygiene practices as an intervention. The study setting was Sri Ramachandra Hospital at Porur, Chennai, at the outpatient department of dermatology. All the patients with psoriasis vulgaris and whoever fulfilled the sampling criteria were samples. The samples were allotted at random in both the groups by using block random technique.
The tools used for the study were in 5 sections.

Section1: Background Variables (demographic and clinical variable)

Section2: Pittsburgh sleep quality index

Section3: Simplified psoriasis severity index

Section4: Katz and Lawton’s’ Activities of daily living scale

Section5: Sleep diary to assess the compliance

Content validity was obtained from ten experts. Reliability of the tool was checked by split half and interrator method. Pilot study was done with 20% of the samples. The pilot study showed feasibility in conducting the study. Few modifications were included in the study as per the experts’ opinion. The main study was conducted among psoriasis vulgaris patients to evaluate the effectiveness of sleep hygiene practices. The data were analysed using non parametric tests, descriptive and inferential statistics were used. The results of the study were subjected to

Comparison

Among the psoriasis vulgaris patients during the pretest 190(95.5%) had poor sleep quality, 9(4.5%) patients had mild sleep quality. During the posttest I (90.5%) patients had poor sleep quality, (9.5%) patients had mild sleep quality. During the posttest II (31%) had poor sleep quality (58%) patients had mild sleep quality (11%) patients had moderate sleep quality. In the posttest III 8(4%) patients had poor sleep quality, 78(39%) patients had mild sleep quality, (78(51.5%) patients had moderate sleep quality and 10(5%) patients had good sleep quality. Whereas in the control group (96.5%) patients had poor
sleep quality, and (3.5%) patients had mild sleep quality during the pretest. The sleep quality remained the same in the posttest I and II but in the posttest III (94.5%) patients had poor sleep quality and (5.5%) patients had mild sleep quality.

On comparing the psoriasis severity in study group all 199(100%) had moderate severity, the severity remained the same in the posttest I, in the posttest II (95.5%) patients had moderate severity (0.5%) patients had mild severity, in the posttest III 168(84%) patients had moderate severity 31(16%) patients had mild severity. In the control group all patients 200(100%) had moderate severity in the pretest and it reduced to 99% in the posttest, I and 95% in the posttest II and 92% in the posttest III.

While comparing the ADL in the study group 1.55 patients were independent and 25% patients were dependent in the pretest. During the posttest I dependency rate reduced to 21.5% and independency rate was 1.5%. In the posttest II the independency rate increased to 6.55 and dependency rate reduced to 19.5%, during the posttest III the independency rate increased to 12.5% and the dependency rate reduced to 15.5%. In the control group independency rate was 8% and the dependency rate was 21.55% during pretest. Independency rate decreased to 6.5%, 0%, 0% in the posttest II, III subsequently. The dependency rate increased to 37%, 45%, and 51% in the subsequent posttests.

Comparison of mean sleep quality scores between study and control group showed a significant difference in the posttest I at p=0.0100, in the posttest II at p=0.0010 and in the posttest III at p<0.0001.
The mean psoriasis severity score was compared and it showed a significant difference in the posttest I at p<0.0001 level and in the posttest III at p<0.0001 level.

When mean ADL score was compared, there was a significant difference between study and control group was observed in the posttest I at p<0.0013, in the posttest II at p<0.0013 level in the posttest III at p<0.0001 level.

**Correlation**

The present study identified a positive correlation between sleep quality and psoriasis severity in the posttest II r=0.117 at p=0.0213 which means when sleep quality improves the psoriasis severity reduces. There is a positive correlation between sleep quality and psoriasis severity in the posttest III r=0.0211 and p=0.003 which is significant. This study revealed that there is a strong positive correlation between sleep quality and pruritus r=0.211 at p=0.003 which is significant.

**Association**

The present study explored that there is no significant association between the demographic variables and sleep quality in the posttest III among the study group and there is no significant association between demographic variable and psoriasis severity in the posttest III among the study group. The present study revealed that there is no significant association between demographic variables and ADL in the posttest III among the study group. This study shows that there is no association between total severity score and
background variables but the components of psoriasis had significant association.

The present study shows that there is a significant association between occupation and erythema at p<0.006** and there was a significant association between occupation and plaque at p<0.003 level** and the study identified significant association between residence and scaling at P<0.043**.

**Regression**

On analyzing the relationship between study variables and background variables a significant relationship between sex and sleep quality was found during the posttest III at the level of p<0.0036 with R² value of 54%.

This study brought out the fact that there was a significant relationship between occupation and erythema during the posttest III at p<0.0082 with R² value of 1.7%. and explored that there was a significant relationship between age and plaque at p<0.037 with a R² value of 1.3%. Also there was a significant relationship between occupation and plaque at p<0.007 level with a R² value of 1.3%.

The present study represents that there is a significant relationship between residence and scaling during the posttest III at p<0.0154 with the R² value of 8.8.
6.2 CONCLUSIONS

The study conclusions were the psoriasis patients have disturbed sleep; nurses need to know the sleep quality assessment. It is mandatory to educate the patient on sleep hygiene practices which improved the sleep quality and reduced the psoriasis severity and improved the ADL.

Quality sleep reduces the severity of psoriasis and work productivity is improved. Hence nurses need to educate the psoriasis patients.

6.3 Recommendations for further research

– Psychological variables can be added
– Other dermatological conditions can be included like vitiligo
– Comparison can be done between two settings
– Same study can be replicated on larger samples
– Objective assessment of sleep can be planned like polysomnography
– The study can be conducted in the community setup.

6.4 IMPLICATIONS FOR NURSING PRACTICE

The need for rest, comfort and sleep are considered a priority for patients and it is necessity to include the sleep component in the daily assessment sheet should be considered.

Education plays a major role in behavior change of the patient. Nurses need to be adequately prepared to educate the patients about the importance of good quality sleep providing a calm and quite environment in the dermatology
ward to promote sleep. Education on sleep hygiene practices and pamphlet can be issued to all the dermatology patients. Also, nurses can be specially trained on sleep education. In service education on sleep hygiene practices can be of benefit to the patients with sleep problems. It is essential to motivate nurses to work in the dermatology ward. Family members can also be involved in promoting the sleep of the patients.

6.5 Implications for Nursing Education

Rotation of students in the dermatology ward can be arranged and students can be educated on assessing sleep quality. Incorporation of sleep studies in the Nursing curriculum will promote understanding of sleep education better. Students can be motivated to organize a mass education programme on sleep disturbances. Also, a super specialty course for nursing students can be organized on sleep therapy as a value add-on course along with the regular programme. A super specialty unit on sleep medicine can be brought for the university.

6.6 Implications for Nursing Research

Nurses working in the dermatology wards and pulmonology wards can be involved in sleep related research studies. Multidisciplinary teams like physiology, pulmonology, and physiotherapy can be involved. A collaborative study can be conducted on the effect of sleep hygiene practices on different dermatological conditions like vitiligo. The study can also be conducted for the risk groups. Similar research can be done in the community settings.
6.7 Implications for Nursing Administration

Nursing administrators can organize an in-service programme for nurses on sleep assessment and promotion of sleep by keeping the environment quite. Sleep pattern assessment can be incorporated in the initial assessment sheet during admission in the dermatology ward. Nurses can be posted in polysomnography room like EEG room. Administrators can motivate the nurses to attend conferences, workshops and symposiums on sleep hygiene and sleep related topics. Administrators can organize a short term or value added course on sleep. Dermatology ward nurses can be oriented on sleep hygiene practices and can create awareness among them.

Sleep study centers can be started where the risk patients could come and get counseled on sleep disturbance.