CHAPTER VII

SUMMARY OF FINDINGS, RECOMMENDATIONS AND CONCLUSION

7.1. Summary of Findings

Socio demographic Information of respondents

a) Of the respondents from Chennai city 66.6 percentage were male, 5.2 percentage of them were in the age group of 20-30 years, 50 percentage of them in the age group of 31 to 40 years, 41.4 percentage of them in the age group of 41 to 50 years and 3.4 percentage of them in the age group of above 51 years. Regarding the level of education 22 percentage of them were illiterates, 39.4 percentage of them had completed tenth standard, 31 percentage of them were degree holders and 7.6 percentage of them were post graduates. As far the occupation of the respondents was concerned 20 percentage were students 32 percentage were teachers, 27 percentage were engineers, 15 percentage were businessmen and 6 percentage of them belonged to other professions. With regard to the income of the respondents, 30 percentage of them were in the income group of below Rs.10,000; 14.6 percentage in the income group between Rs.10,000 to Rs.20,000; 37 percentage of them were in the income group between Rs.20,000 to Rs.30,000; 34 percentage of Rs.30,001 to Rs.40,000; 15 percentage were in the income group of Rs.40,000 and above. Regarding marital status of the respondents 2.6 percentage of them were single, 73.4 percentage of them were married, 10.6 percentage were divorced, 3.4 percentage of them were widow/widowers.
b) Out of the 500 respondents from Coimbatore 69.6% of are male and 30.4% are females, 6 percentage of them were in the age group of 20-30 years, 50 percentage of them in the age group of 31 to 40 years, 42 percentage of them in the age group of 41 to 50 years and 2 percentage of them in the age group of above 51 years. Regarding the level of education 13 percentage of them were illiterates, 38 percentage of them had completed tenth standard, 40 percentage of them were degree holders and 9 percentage of them were post graduates. As far the occupation of the respondents was concerned 14 percentage were students 24 percentage were teachers, 52 percentage were engineers, 5 percentage were businessmen and 5 percentage of them belonged to other professions. With regard to the income of the respondents, 20 percentage of them were in the income group of below Rs.10,000; 15.4 percentage in the income group between Rs.10,000 to Rs.20,000; 40 percentage of them were in the income group between Rs.20,000 to Rs.30,000; 6.6 percentage of Rs.30,001 to Rs.40,000; 18 percentage were in the income group of Rs.40,000 and above. Regarding marital status of the respondents 10 percentage of them were single, 78 percentage of them were married, 8 percentage were divorced, 4 percentage of them were widow/widowers.

c) Of the 500 respondents of the study from Vellore, 76% of are male and 24% are females, 30 percentage of them were in the age group of 20-30 years, 41 percentage of them in the age group of 31 to 40 years, 25 percentage of them in the age group of 41 to 50 years and 4 percentage of them in the age group of above 51 years. Regarding the level of education 24 percentage of them were illiterates, 24 percentage of them had completed tenth standard, 40 percentage of them were degree holders and
12 percentage of them were post graduates. As far the occupation of the respondents was concerned 22 percentage were students 32 percentage were teachers, 15 percentage were engineers, 22 percentage were businessmen and 9 percentage of them belonged to other professions. With regard to the income of the respondents, 26 percentage of them were in the income group of below Rs.10,000; 21 percentage in the income group between Rs.10,000 to Rs.20,000; 26 percentage of them were in the income group between Rs.20,000 to Rs.30,000; 16 percentage of Rs.30,001 to Rs.40,000; 11 percentage were in the income group of Rs.40,000 and above. Regarding marital status of the respondents 15 percentage of them were single, 71 percentage of them were married, 10 percentage were divorced, 4 percentage of them were widow/widowers.

1. Out of the respondents from Chennai 65.4% were using OTC medicine, 72% from Coimbatore and a very high percentage of 89% from Vellore. This gives an important inference for the study that the residents of Vellore rank first followed by Coimbatore and Chennai in the usage of Over the Counter medicine without a valid prescription from the physician.

2. The ailments commonly occupying the first 5 ranks for which OTC medicines were purchased were head ache, cough and cold, fever, stomach ache and acidity for the respondents of all the 3 cities, though there’s a slight variation in the order. Therefore it could be inferred that the respondents of the three cities in the study approached the medical shops in order to purchase the medicines across the counter without a prescription from a medical practitioner experienced common ailments.
3. Of the nine variables namely Ease and convenience, Time saving factor, quick relief, work being unaffected, money saving, past experience, distrust on physicians, perception that there was no need to consult a Doctor and promotional activity, which were considered as influencing factors for the respondents to purchase OTC medicines, Ease and convenience, Time saving factor and quick relief were found to be the most influencing reasons for the respondent consumers from all three cities to their purchase decision of OTC medicines.

4. The relationship between the purchase of OTC medicines and the socio-demographic factors of the respondents from the three cities Chennai, Coimbatore and Vellore were analysed, using Chi square. An association was found between age, income, marital Status and OTC purchase; no association found between gender, education, occupation and purchase practice of medicines over the counter for Chennai city. An association was found between gender, age, education, income and OTC purchase; no association between occupation, marital Status and OTC purchase practice among respondents from Coimbatore. An Association was found between age, education and OTC purchase; no association between gender, occupation, income, marital Status and purchase practice of OTC medicines among respondents from Vellore. The common demographic variable where there was an association for the three cities was age.

5. An analysis to examine the relationship between role played by the pharmacists and the purchase decision of OTC medicines by the respondent consumers from Chennai city, Coimbatore and Vellore was done using Chi square test. The results for the three cities were: Chennai-Chi Square value 396.7 (df=1) p<0.001; Coimbatore Chi Square value 268.7(df=1) p<0.001; Vellore ChiSquare value 247.2(df=1) p<0.001. It showed that there
was an association found between role played by pharmacists and purchase decision of OTC medicines by the respondents belonging to all the three cities in the study.

6. It was found that consumers from all the three cities of the study had never (100%) checked whether the person from whom they purchased medicine from the pharmacy was a qualified pharmacist.

7. Most of the consumers 79.51% from Chennai City, 77.78% of the respondents from Coimbatore, 60.67% from Vellore had to rely upon the others in order to understand the words on the package of the medicine as they had problems in understanding it by themselves.

8. Regarding advice seeking behaviour, 82.57% of the respondents from Chennai city, 83.33% of the respondent consumers from Coimbatore, 74.16% from Vellore had sought advice from others while purchasing medicine from pharmacies without prescription.

9. From Chennai 38.83%, from Coimbatore 65.83% and 64.94% respondents from Vellore had sought advice from relatives before making a decision to purchase OTC medicine.

10. Of the respondents, 63.92% from Chennai city, 90% from Coimbatore, 89% from Vellore had felt that it was safe to buy and use medicines without prescription.

11. Most of the respondents, i.e., from Chennai city 94.19%, 90% from Coimbatore and 96% from Vellore maintained stock of OTC medicines at home.

12. Regarding certainty about the issue whether maintaining stock of medicines purchased over the counter of pharmacies at home is to be considered a healthy practice or not, majority of the respondents from Chennai (66.36%), Coimbatore (67.23%) and from Vellore (85%) were not certain.
13. Most of the respondents from Chennai (93.58%), (97%) from Coimbatore and (90%) from Vellore were uncertain about the side effects reported due to the medicines bought without prescription.

14. For the query “whether they read information on label and package of OTC medicine before purchasing it from medical shops” 90% of the consumers from Chennai, 95% from Coimbatore and 90% from Vellore disagreed.

15. Analysis showed that 85% of the respondents from Chennai, 95% from Coimbatore and 86% from Vellore had the practice of using old prescriptions for purchasing medicines over the counter.

16. Majority of the respondents from Chennai, 87% of them, from Coimbatore 88% and 86.5% from Vellore preferred Over the counter medicine to the medicine prescribed by medical practitioners.

17. Of the respondents, 91% of the OTC consumers from Chennai, 89% from Coimbatore and 90.5% of the consumers from Vellore were of the opinion that fake/counterfeit/banned medicines were not sold at medical shops and a meagre number of consumers only felt that there was a possibility.

18. Regarding awareness about the Act specially enforced to protect the right of consumers, 69.2% of the respondents from Chennai city, 85.8% of the respondents from Coimbatore and 76.2% from Vellore city were aware of it.

19. Most of the respondents, from all the three cities i.e., 74.4% from Chennai, 87.8% from Coimbatore and 71.2% from Vellore were aware that there is a forum for redressal of complaints by consumers.
20. Analysis showed that out of the 500 respondents, 416 from Chennai, 395 from Coimbatore and 428 respondents from Vellore had an opinion that the Consumer Courts had the power to deal with problems associated with the OTC medicines purchased by the public.

21. Regarding uncertainty in the minds of the consumers of OTC medicines about the legal aid that might be available to them, in case, they had experienced any side effects due to non-prescribed medicines was uniform with mostly all the respondents of the three cities where the study was undertaken: Chennai 85.80%, Coimbatore 89.6% and Vellore 91.2%

The findings of the study support two of the hypotheses namely (1) Existence of a significant relationship between the socio demographic variables of the consumers of OTC and their decision to purchase OTC drugs and (2) a significant relationship between the pharmacists and the OTC purchase decision of consumers. Hence, both the null hypotheses were rejected.

The findings of the study suggest that the consumers have the practice of purchasing medicines across the counter without prescriptions, do not read information on the leaflet, use old prescriptions for buying medicines, but do not maintain stock of OTC medicines at home, rely upon pharmacists to a great extent while buying medicines from the pharmacy and preferred Over the counter medicine to the medicine prescribed by medical practitioners. Though they were aware of the existence of consumer redressal forum and opined that the Consumer Courts had the power to deal with problems associated with the OTC medicines purchased by the public, they were uncertain about the legal aid that might be available to them, in case, they had experienced any side effects due to non-prescribed medicines.
7.2. Recommendations

The issues pertaining to OTC drugs' safe usage are many in India for which the recommendations were made based on the research study undertaken:

1. The consumers should not purchase over the counter medicines without prescription from a qualified medical practitioner.
2. The consumers should ensure that they purchase medicines only from qualified pharmacists.
3. The consumers should rely upon the suggestions made by the pharmacist only if the pharmacist is a person qualified to do so.
4. Continuous pharmacist education (CPE) through training sessions, seminars, conferences should be undertaken by the Government as many consumers of OTC medicines rely upon the pharmacists in their OTC purchase decision.
5. The consumers should rather consult a physician in diagnosing the ailment and get treated instead of getting advice regarding medicines from relatives, friends and reference groups and buy medicines from medical shops without a prescription.
6. The Government should widely publicize the ill effects of purchasing medicines Over the Counter without prescription and create awareness amongst the public regarding this.
7. The practice of keeping stock of medicines at home which are purchased Over the counter without prescription is all the more unsafe and should not be followed.
8. Health education programs need to be undertaken by the Government to educate the public about the possible side-effects of OTC medicines.
9. Strong change in the labelling practices of OTC medicines has to be compulsorily enforced if they have to be sold outside medical shops. Labelling of OTC medicines has
to be in local languages and all the instructions have to be in simple and easily understandable words.

10. The regulatory mechanism should be very strict in enforcing stringent action against the sale of Banned and Counterfeit medicines in medical shops, as the health risk encountered by the consumer of OTC medicines becomes manifolds in such a situation.

11. Consumer awareness programs should be undertaken by the Government to educate the public regarding their rights, presence of the Consumer Forum, the power of the consumer forum in dealing with problems associated with the use of Over the counter medicines and the legal aid available to them in case of side effects experienced by the public due to the usage of OTC medicines. The TV and film media could also be tapped to spread the message and there could be corporate sponsorship for such programs.

12. Incorrect use of OTC medicines is risky and physicians have a role in prevention efforts to thwart unhealthy practices. Improved patient education and continued communication about the proper use of OTC medications will help minimize the potential for harm.

13. A closer national collaboration between the drug regulatory authority and the customs, police, professional and consumer organizations, pharmaceutical companies, distributors, and other relevant institutions is recommended.

7.3. Conclusion

OTC products can cause side effects, drug interactions, and disease interactions. Monitoring systems, a partnership between patients, physicians, and pharmacists and the provision of education and information to all concerned on safe self-medication, are proposed strategies for maximizing benefits and minimizing risks. The results of this research should be used to develop policies that could lead to improvement in health care of Indian citizens and
regulate the sale of medicines that are sold over the counter without prescription from qualified medical practitioners.

7.4. Scope for Further study

1. A Study encompassing the role played by Consumer Forums in case of aggrieved patients due to side effects of OTC medicines.

2. A study on the role played by Pharmacists in the purchase decision of Over the counter medicines by consumers.

3. A comparative study between India and other countries on OTC sale of non prescribed medicines at medical shops.

4. A study about the level of consumer’s awareness about ill effects of OTC medicines.

5. A study on the awareness level of consumers of OTC medicines about the legal aid for side effects caused by non-prescribed medicines.