CHAPTER 5

SUMMARY AND CONCLUSION
5.1 Summary

- This study reported the prevalence of 18% of WRMSD among Medical Laboratory professionals with majority of the participants complaining of pain/discomfort in neck (8.0%).
- The disorders were more prevalent in younger age with females being at higher risk.
- Computer workstation and pipetting workstation was found to be the most important contributory factor in WRMSD with people having 2.5 and 1.4 times higher risk of WRMSD compared to people at no risk.
- Ergonomic Intervention which was combination of workstation modification, exercise and education was beneficial in reducing the scores of NDI clinically as well as statistically and scores of DASH clinically, thereby improving the upper quadrant function.
- Structured ergonomic intervention was beneficial in improving the Physical component summary scores of SF36 but, the mental component summary score didn’t show changes.
5.2 Strength of the study

- This is the first study which included all the laboratory professionals covering all the laboratory task.
- In this study, to minimize the effects of variation between the subjects, the differences between the participating workplace were kept to a minimum (e.g. from same type of organization doing same type of work and being financially equivalent.)
- This study is the first of its kind which included ergonomic intervention with a combination of exercise, education and workstation modification.
- The exercises used in this study may be easier to implement in laboratory setting, since they did not require the use of any equipment and the subjects generally felt that any of the exercises were easy to do.
5.3 Implication of the study

Based on the result analysis of Phase I and II of the study we strongly recommend that Work place intervention is the best way to prevent and manage WRSMD. And intervention should be combination of exercise, workstation modification and education about the risk factors and ideal ergonomics.
5.4 Limitation of the study

- Additional physical activity measurements were not recorded in both the groups.
- The current study evaluated the effect of ergonomic intervention which could not be followed for some of the workstations all the time.
- The exercises could not be monitored by investigator on daily basis.
- There was no blinding in the study procedure, the investigator was completely aware of the allocation received by the participant and herself assessed the outcome measure.
5.5 Future recommendation

- Future research may be directed towards more objective measurement of workstation risk factors and its match with the anthropometric measurements.

- Since ergonomic intervention was found to be effective, it is recommended that it should be implemented for all laboratory professionals.
5.6 Conclusion

The prevalence of WRMSD among Laboratory professionals was found to be 18%. Computer workstation and pipetting workstation was found to be the most important contributory factor in WRMSD. Ergonomic intervention programs were effective in improving the upper quadrant function and QOL, among participants with WRMSD.