CHAPTER 6

6. SUMMARY, CONCLUSION, NURSING IMPLICATIONS AND RECOMMENDATIONS

6.1 SUMMARY

Children are one third of our population and the disabled children are also the part of this community. Worldwide, 120 to 150 million children and young people are living with disability. India has about 2.68 crore disabled people among them 35.29% are disabled children with different kinds of disabilities. The prevalence of locomotor disability among different kind of disabilities is highest in the country. Polio is one of the major cause of locomotor disability and contributing to 28.9% cases.

Quality of Life as the broad ranging concept affected in a complex way by the person's physical health, psychological state, levels of independence, social relationships, personal beliefs and their relationship to salient features of their environment. Numerous recent research findings indicate that children with disability are often at increased risk for the development of secondary conditions and most commonly reported problems are progressive muscle weakness, joint pain, contractures, fatigue, cold intolerance, malnutrition, poor oral health, constipation, mood state disturbances, low self esteem, poor social relationship, and negative societal attitude etc.

Health promotion intervention is a person’s sustained participation in managing their health in a way that creates the necessary self-efficacy to achieve physical, psychological and social wellbeing. It includes intake of healthy diet, maintenance of personal hygiene, regular performance of exercises, encouragement
and continuous capacity building to operate and recuperate properly from a disability. Reviews of current literature suggest that regular practice of health promotion intervention may have various physical, psychological and social benefits along with reduction of occurrence in secondary conditions due to disability.

Despite the increase in quality of life research in adults, quality of life in children is relatively neglected and there is critical need of evidence based health promotion intervention for maintaining and improving overall quality of life. Therefore, the present study was undertaken to evaluate the effectiveness of health promotion intervention in improving the quality of life among physically challenged children in selected schools of Punjab.

The objectives stated for the study were

1. To assess and compare the pre interventional and post interventional level of quality of life among physically challenged children in study and control group.

2. To determine the effectiveness of health promotion intervention on quality of life among physically challenged children in study group.

3. To find out the association between mean difference score of quality of life of physically challenged children in study and control group with their selected demographic and clinical variables.

The secondary objective stated for the study was to assess the level of satisfaction on health promotion intervention among physically challenged children in study group.

The Research hypotheses formulated were

RH1 – There is a significant difference in the post interventional level of quality of life among physically challenged children between study and control group.

RH2 – There is a significant difference in the pre interventional and post interventional level of quality of life among physically challenged children with in study group.
RH3 – There is a significant association between the mean difference score of quality of life of physically challenged children in study and control group with their selected demographic and clinical variables.

An extensive review of literature for the study was collected from books, journals, Medline data base, EBSCO, CINAHL, by the investigator. Conceptual framework adopted for the present study was based on Sampalli T, et al proposed model of integrated care to improve health outcomes for individuals with multimorbidities (2012).

To accomplish the objectives a quasi-experimental study with pre interventional and post interventional control group design was conducted at Blind and Handicapped Development Society Special School, Hoshiarpur (study group) and Vocational Rehabilitation Training Centre, Ludhiana (control group) district of Punjab. The sample for present study were 120 physically challenged children suffering with locomotor disabilities in the age group of 10 to 19 years, out of them 60 were in study group and 60 were in control group. The sample were selected through non-probability purposive sampling technique. The data collection tool consisted of two sections. Section A: structured questionnaire for assessing demographic and clinical variables of physically challenged children and Section B: Quality of life questionnaire to assess the quality of life among physically challenged children. Health promotion intervention consisted of health teaching on diet, personal hygiene and exercise programme. Content validity of tool and intervention was established by submitting the proposed draft and obtaining valuable opinion and suggestions along with content validity certificate from the eight experts in the field of paediatrics, orthopaedics, physiotherapy, and paediatric nursing.

A pilot study was conducted in month of January 2013 for the duration of one month to assess reliability of tool, feasibility and practicability of the study and also to determine major flaws in the design. The main study was conducted from April 2013 to March 2014. The pre interventional assessment of quality of life was done at baseline for both the study and control group. After this the study group received health promotion intervention provided by qualified physiotherapist and
investigator as per plan of intervention for the duration of 36 weeks but control group received routine care. A practice diary was maintained to confirm regular practice of health promotion intervention. The post interventional assessment of quality of life was done at 12th week, 24th week, and 36th week for both the study and control group by using the same questionnaire. The sample of control group did not receive the health promotion intervention during the course of study; however, on completion of the study, they also received health promotion intervention for the duration of one week and instructional manual on health promotion intervention was distributed to them. Ethical aspects of study were maintained through the study.

The collected data was tabulated and analyzed in accordance with the objectives of study by using descriptive and inferential statistics through Statistical Package for the Social Sciences version 16 software (SPSS Inc., Chicago, IL, USA) and Instat.

6.1 The major findings of the study were

- There was no statistically significant difference found in baseline values of overall quality of life, and physical, psychological and social domains of quality of life between study and control group (p> 0.05).
- There was very high statistically significant different found in quality of life mean score in post interventional I (t=4.64), post interventional II (t=11.62) and post interventional III (t=12.62) after health promotion intervention at p=0.001 level between study and control group.
- There was very high statistically significant different found in physical domain of quality of life mean score in post interventional I (t=4.86), post interventional II (t=9.34) and post interventional III (t=10.61) after health promotion intervention at p=0.001 level between study and control group.
- There was statistically significant different found in psychological domain of quality of life mean score in post interventional I (t=2.21, p=0.01), post interventional II (t=6.08, p= 0.001) and post interventional III (t=6.88, p=0.001) after health promotion intervention between study and control group.
There was statistically significant different found in social domain of quality of life mean score in post interventional I (t=1.98, p=0.05), post interventional II (t=4.84, p= 0.001) and post interventional III (t=5.74, p=0.001) after health promotion intervention between study and control group.

There was statistically very high significant difference found between the pre interventional and post interventional quality of life mean score among physically challenged children in study group (F=338.8, p=0.001), whereas, in control group, no significant difference was noted (F=2.14, p=0.6).

There was statistically very high significant difference found between the pre interventional and post interventional mean scores of physical domain (F=351.17 p=0.001), psychological domain (F=139.28 p=0.001), and social domain (F=158.17 p=0.001) of quality of life among physically challenged children in study group, whereas, in control group, no such significant difference was noted.

Mean gain score from baseline (pre interventional ) till 36th week (post interventional III) in study group was 18.0 (13.7%) for physical wellbeing, 8.18 (19.9%) for psychological wellbeing, 5.74 (13.9%) for social wellbeing and 31.92 (14.9%) for overall quality of life, whereas, in control group was 0.46 (0.3%) for physical wellbeing, 0.50 (1.2%) for psychological wellbeing, 0.40 (1.0%) for social wellbeing and 1.36 (0.6%) for overall quality of life.

There was significant association found between mean difference score of quality of life, physical wellbeing, psychological wellbeing and social wellbeing of physically challenged children with age, family income, and residential area, level of locomotor disability and duration of locomotor disability in study group.

None of the demographic and clinical variables were significantly associated with mean difference score of quality of life, physical wellbeing, psychological wellbeing and social wellbeing of physically challenged children in control group.
6.2 CONCLUSION

The results of present study revealed that, there was very high statistically significant difference found in overall quality of life, physical wellbeing, psychological wellbeing, and social wellbeing of physically challenged children between study and control group. The regular practice of health promotion intervention for the duration of 36 weeks was found to be very highly effective in reducing the occurrence and severity of physical, psychological, social problems and improving overall quality of life among physically challenged children in study group. No adverse events were reported. This is a simple, appropriate and affordable intervention can be practiced regularly. Health care professionals, parental and teacher training and motivation are necessary for their role in effective implementation of this intervention among physically challenged children in hospital, community, home and school settings.

6.3 NURSING IMPLICATIONS

Some of the implications derived from the present study in nursing practice, nursing education, nursing administration and nursing research.

6.3.1 Nursing practice

- Nurses working with physically challenged children should posses knowledge regarding assessment of different domains of quality of life, factors that affect the quality of life and health promotion strategies so they can encourage school teachers, parents, family members and community leaders to actively participate in promotion of health and prevention of secondary conditions among physically challenged children.

- Nurses should understand physically challenged children perception towards quality of life with disability in order to give optimal information and encourage them to appraise their health situation positively to minimise the adverse impact of disability.

- Health promotion intervention has many positive effects and no known negative effect on physical, psychological and social wellbeing of physically challenged
children so nurses should use it as important instrument for improving quality of life among physically challenged children.

- Nurses can educate and motivate physically challenged children regarding intake of nutritious diet, maintenance of personal hygiene and performance of regular exercises to minimise the impact of disability and improving the quality of life.

- Physically challenged children who experience new problems because of disability should get benefit from an individually planned multidisciplinary intervention with emphasis on health promotion intervention.

- Physically challenged children with good family and social support are found to have better quality of life therefore, nursing measures need to focus on encouraging physically challenged children to participate in physical activities, leisure activities, promoting positive living, encouraging them to express their feeling to their friends, family members or well wishers and encouraging the caregiver to extend their love and care in every aspect of their lives.

- The existence of psychosocial problems among physically challenged children magnifies the need for preventive education on psychosocial problem through nursing personnel to prevent further incidence of psychosocial problems and their complications.

- Nurses working with physically challenged children should establish short-term goals, promote positive reinforcement through periodic feedback of results, document individual achievements on progress charts, and compare an individual's achievements to past status rather than to established norms.

- Nurses should focus on eliminating barriers in the physical, social, and institutional environments. This involves activities such as educating others and working to change attitudes so that individuals with disabilities are believed in and is accepted by others, as well as advocating for physical accessibility and progressive employment criteria and practices.
6.3.2 Nursing education

- In service education and continuing nursing education courses should be conducted for the nurses aiming to create awareness on health promotion intervention practice for prevention of secondary health problems among physically challenged children.

- Nursing education programme must orient nursing students with various forms of disabilities, secondary health conditions among disabled children and health promotion strategies so they will be well prepared to assist clients and community at large to maintain and improve quality of life of such children.

- The findings of present study can be presented in seminars, workshops, and conferences organized in nursing institutions to improve the knowledge of nursing students and faculty regarding effect of health promotion intervention in improving the quality of life among physically challenged children.

- Health education should be made a compulsory component of school education at all levels. Special efforts should be made to develop health education programmes on nutrition, personal hygiene, exercises and other health promotion interventions for physically challenged children as well as significant extra efforts should be made for its implementation in various settings.

- Nursing students must be encouraged to actively participate in delivering health education on diet, personal hygiene and exercises to physically challenged children.

6.3.3 Nursing administration

- Nursing is an evolving profession so in order to improve the quality of nursing care practices should be evidence based. The present study found that health promotion intervention is effective in improving quality of life among physically challenged children. The administrator can communicate these findings to the nurses so they can incorporate this in their routine practice.

- Nursing administration should formulate policies and protocols on health promotion intervention for prevention of secondary health problems among physically challenged children and execute those with added research evidences.
• Nursing personnel working in various health settings should be given in-service education to update their knowledge, change their attitude and enhance their abilities in assessing quality of life among physically challenged children and plans and provide holistic care in order to improve their quality of life.

• Nurse administrator should plan, prepare and avail cost effective health education material to nurses working with physically challenged children so they can teach them effectively regarding health promotion intervention.

• Nurse administrator should develop a health promotion programme with multilevel approach including personal and environmental factors, directed to persons with late effects of disability. The benefits of health promotion intervention on quality of life of physically challenged children can be propagated to the general public through mass media to lead a healthy and happy life.

• Nurse administrator should provide necessary administrative support to conduct research on health promotion activities for improving quality of life among physically challenged children.

6.3.4 Nursing research

• The findings of the present study serve as a base for health professionals and students to conduct further studies.

• The research methodology, tool and findings of the study can be added to nursing literature. It may serve as a referral material for students.

• The study findings can be utilized for secondary analysis and meta analysis to study about effect of health promotion intervention on quality of life among physically challenged children.

• Research studies conducted by Indian nurses in this area are very few. It is time that all nursing personnel can be motivated to indulge in more research activities to find out scientifically tested assessment tools and several more effective interventions for improving quality of life among physically challenged children.

• The findings of present study give base for future descriptive, comparative, correlational, longitudinal, quasi-experimental and experimental studies in the
same field and collateral studies to build a wider base of nursing knowledge and evidence.

- The review reflects the paucity of rigorous research evaluating the effectiveness of health promotion intervention on quality of life among physically challenged children. The same field needs to be further investigated by well-designed randomised controlled trials, and there is a need of follow-up data to demonstrate the extent to which the effect of intervention are maintained over time and linked to attempts to clarify clinical meaning.

- Further research should explore ways that health care professionals can assist physically challenged children to develop behaviours including proper nutrition, personal hygiene, physical activity, stress management, social and spiritual growth that enhance overall health, minimise secondary conditions and maintain a good quality of life.

- Researchers and policy makers must be aware of and respond aggressively to the change in the nature of childhood disability in recent years. Several decades ago the problems that most children with disabilities confronted were physical in nature. Today, childhood disability more often involves a mental health disorder—one that often has more severe consequences than many physical health conditions. A key goal for society today is to devote resources in preventing, diagnosing, and managing these conditions to improve children’s functioning and trajectories.

6.4 RECOMMENDATIONS

- A similar study can be replicated on a large number of samples for an extended period of time with improved/modified health promotion intervention in different settings to validate and generalize the findings.

- Further multi-centric prospective studies with a large sample size can be conducted to see the effect of these interventions with involvement of psychologist and social worker in setups providing rehabilitation to such children can be foreseen.
• A randomized controlled trial can be conducted to evaluate the effect of health promotion intervention on quality of life of physically challenged children.

• A similar study can be replicated on a large number of samples for an extended period of time with mixed method research approach to validate and generalize the findings.

• A similar study can be conducted in different target population like aged peoples.

• A comparative study can be conducted on effect of health promotion intervention among different category of physically challenged children.

• A comparative study can be conducted on quality of life among physically challenged children residing in urban and rural area.

• An exploratory study may be conducted on quality of life and factors affecting the same among physically challenged children.

• A study can be conducted on creating awareness through IEC on health promotion intervention for managing secondary health problems among physically challenged children in various settings.

Chapterization

Chapter VI: It dealt with summary, conclusion, nursing implications and recommendations.

References and appendices are as follows