A Study to Assess the Effectiveness of Teaching with Concept Map Regarding Knowledge on Cerebral Palsy among III B.Sc Nursing Students in a Selected Nursing Colleges

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Introduction:

Each child is a unique person, a person whose future will be affected for better or worse by the influences that mould his or her life during the early years. One child will grow up to become a joy to parents and a blessing to others. Whereas special ones will grow up and become a burden, sorrow and challenge to society.

Many tender ones are there who cannot stand on their own foot or cannot achieve their activity of daily living and are totally depended. Raising and taking care of such a gifted child is both a joy and a challenge, yet parents of gifted children have few resources for reliable parenting information. Awareness for the need of the services to take care of those disabled children and provision of the services are still far beyond the standard or basic requirement. Little attention to our special ones will prove much more than expected.

Cerebral palsy is a common developmental disability first described by

‒William Little‖ in the 1940s.

In the term cerebral palsy (CP),'Cerebral refers to the injured Central Nervous System (CNS) and Palsy describes the lack of voluntary muscle strength or control. Though the term cerebral palsy (CP) was originally coined more than a century ago and loosely translates as "brain paralysis, a precise definition

NEED FOR THE STUDY

Children dream dreams without limits...

If you ask a child what their dreams are, they will tell you ‒I'm going to fly aero planes ―when I grow up I will visit the Moon and then Mars‖ etc...

Then turn and ask our children, our beautiful children affected by cerebral palsy, what their dreams are? They also have dreams, but these children's dreams are slightly different…more limited… Wouldn't it be worthier to help someone to dream their dreams without limits?

The incidence of cerebral palsy has not changed in more than 4 decades, despite significant advances in the medical care of neonates and children

A study conducted in Bangalore children hospital. 75% out of approximately 1000 cases of loco-motor

disabilities evaluated for the Govt. of Karnataka were found to be due to cerebral palsy. In just one residential school in Tumkur, nearly 90% of the children were found to be suffering from cerebral palsy.[8]

Another study was conducted in the framework of a population-based, single- centre, cross-sectional surveillance at R.S. Pura town, Jammu city, to determine the prevalence of cerebral palsy in children aged <10 years. A total of 11 cases of cerebral palsy were ascertained yielding a crude prevalence rate of 2.27per 1000 in the age group of <10 years. The proportion of cerebral palsy occurring in males was higher than that in females. The research concluded that the prevalence rates of cerebral palsy among children <10 years of age in R.S. town compare favorably with studies from developed countries.[9]

Provide a helping hand towards the child with cerebral palsy. Helping hands are the parents and the care takers of the child, who are suppose to play a major role for the well being of the child with cerebral palsy. Many studies shown that a helping hand for these gifted children can do much more than several praying lips.

CONCEPTUAL FRAMEWORK

Conceptual framework is a complex whole of interrelated concepts or abstractions that are assembled together in some rational scheme by virtue of their relevance to a common theme. A conceptual model provides for logical thinking; for systematic observation and interpretation of observed data. The model also gives direction for relevant questions on phenomena and points out solutions to practical problems as well as serves as a springboard for the generation of hypotheses to be used.

The main concepts of general systems theory are input, throughput, output and feedback. System can be open or closed. Open systems are open for exchanges of matter, energy and information. The open system receives various inputs . Through put refers to the process whereby system transforms, creates and organizes. Output refers to energy, information or matter that is transferred to the environment as a result of the throughput.

Input

Inputs are sources needed by system. In this study the pretest assess the existing knowledge of III Bsc nursing students regarding cerebral palsy and their demographic variables such as age, gender, qualification of parents, family income and exposure to knowledge on care of child with cerebral palsy. It was assumed that III Bsc nursing students would have some knowledge on cerebral palsy and these demographic variables would have some influence on pre existing knowledge of III Bsc nursing students.

Throughput

Through put is the transformation of knowledge among III Bsc nursing students regarding cerebral palsy. In this study, the throughput was the distribution of teaching with concept map on cerebral palsy

Output

In this study, output is knowledge gain by the students and it was measured by post test after

administration of teaching with concept map on cerebral palsy. The knowledge may be adequate, moderately adequate and inadequate.

Review of Literature:

A study on ‒Health- related quality of life in childhood cerebral palsy|. The objective of the study was to describe the Health – Related Quality of the life (HRQOL) of a cross section of children with cerebral palsy using the child health questionnaire. The children from out-patient clinics at a tertiary care children's hospital were taken total N=177; 98 boys, 79 girls mean age standard deviation (SD), 8.64.2y with cerebral palsy were enrolled as a convenience sample. Study subjects were stratified by severity of cerebral palsy using the Gross motor Function Classification system. The study concluded that children with cerebral palsy have reduced HRQOL and the degree to which it is reduced is related to the severity of their cerebral palsy.

Objectives:

1. To assess the pretest knowledge level of III BSc nursing students regarding cerebral palsy

2. To find the effectiveness of teaching with concept map regarding care of children with cerebral palsy among III BSc nursing students.

3. To explore the association between post test knowledge level of III BSc nursing students with their selected demographic variables.

Findings of the study:

This study determines the effectiveness of teaching with concept map regarding cerebral palsy. The statement of the problem was "A study to assess the effectiveness of teaching with concept map regarding knowledge on cerebral palsy among III BSc nursing students in selected nursing colleges.

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In the present study it was found that all of the students belongs to age group of 19-23 years. Majority of the students 49(81.66%) were females. This study is supported by the study conducted on the knowledge regarding safe pediatric injection among nursing students, Bangalore were 90% (54)of students were females[54]

In the present study 4 (6.7%) student nurses had undergone exposure to information regarding cerebral palsy. The finding of the present study was supported by another study conducted in Ramakrishna Nursing College, Tamil Nadu to assess the knowledge on incidence of cerebral palsy; in that study only 6 (10%) student nurses had information regarding cerebral palsy.[55]

Also the present study attempted to find out the father's educational status of the students who participated in the study. Most of them are graduate 28 (46.6%). The finding of the present study was supported by another study which was conducted to evaluate the father's impact on their children's learning and achievement.

Using data from the National Longitudinal Survey of Youth on children between the ages of 6 and 12, this study examined whether increases in fathers' educational attainment are associated with changes in

children's academic achievement .Results suggest that children of young fathers with high levels of education perform better on tests of academic skills[57].

With this we can conclude that father's educational status will affect the knowledge of their children.

The first objective was to assess the pretest knowledge level of III BSc nursing students regarding cerebral palsy

The present study attempted to assess the pre-test knowledge regarding cerebral palsy Majority 86.7% had inadequate knowledge; 13.3% had moderately adequate knowledge and none of them had adequate knowledge. The mean percentage score obtained for overall knowledge was 16.47% which shows that the students had inadequate knowledge regarding cerebral palsy.

Aspect wise knowledge level assessment regarding cerebral palsy was less in the pretest when compared to the post test

With regards to overall concept of cerebral palsy the mean score in pretest was 16.47 whereas the mean score of post test was 32.66. The aspect wise mean knowledge score related to prevention and management revealed that pretest score was 6.01 where as in post test was 12.5

The above finding is supported by study findings of _Knowledge of preventive factors and early signs of cerebral palsy: a systematic review from a gender perspective'. The result showed that the mean score in pretest was 1.36and in post test the score was 2.68. The area wise mean knowledge related to preventive factors and early signs of cerebral palsy revealed that the mean the pretest was 2.18 and in post test the mean score was3.30[58]

With above study findings it can beconclude that the students had no prior exposure to the topic in their Ist and IInd year of nursing curriculum thus they are lacking the knowledge.

The second objective was to find the effectiveness of teaching with concept map regarding care of children with cerebral palsy among III BSc nursing students.

After comparing the overall mean pretest knowledge score (16.47) and mean post test knowledge score (32.66), the mean knowledge enhancement was 16.19 (41.5%). The computed t value i.e.30.4 was higher than the table value i.e.2.39 at p=0.05 level which is significant. Thus teaching with concept map regarding cerebral palsy was effective.

On comparison, the mean pretest knowledge score was 16.47 where as the mean post test knowledge score was 32.66. Thus the H_1 which states that there will be a significant difference between the mean pretest and post test knowledge level of III BSc nursing students is accepted.

The finding was supported with the study which was conducted by the Department of Behavioral Sciences and Health Education, Rollins School of Public Health, Emory University, Atlanta, Georgia, to describe how concept mapping is applied to various public health problems in cerebral palsy. The result of the study indicate that Concept mapping is a tool to assist in strategic planning that allows planners to work and understand better through a sequence of relative concepts[59].

Another experimental study conducted to find out the ―Effectiveness of conceptual map Teaching Method on Short and Long Term Learning in Nursing Students‖. The results revealed that teaching by conceptual map method could significantly improve the learning process of nursing students[60]

Besides, an article discusses the use of concept maps in early childhood education. In light of a theory it suggests that information is processed and stored in memory in both linguistic and visual forms, it is argued that concept maps can be used in classrooms to help children organize and spatially represent both what they know and what they are thinking. To sum up, the use of concept maps on teaching the students, suggests various ways of introducing children to the process of constructing their

Hence we can conclude from the above studies that teaching with concept map will improve the learning and understanding of student nurses regarding cerebral palsy as it is an innovative teaching strategy which depicts data at a glance.

The third objective was to explore the association between post test knowledge level of III BSc nursing students with their selected demographic variables.

The findings of the study revealed that there was significant association between the gender and their post test knowledge score. Therefore, hypothesis II stating that, ‗there will be a significant association between the mean post-test knowledge score of students with their selected demographic variable' is accepted. There is no significant association seen between the knowledge scores and other selected variables like age, parent's education, monthly income at 0.05 level of significance.

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