To Assess the Effectiveness of Planned Teaching on Knowledge Regarding Angelman Syndrome among Nursing Students

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Authors’ contributions

This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.

Article Information

DOI: 10.9734/JPRI/2021/v33i47B33109

Editor(s):
(1) Dr. Vasudevan Mani, Qassim University, Saudi Arabia.

Reviewer(s):
(1) Preeti Lata Rai, Shri Ram Murti Smarak Institute of Medical Sciences, India.
(2) Kalpita Shringarpure, Medical College Baroda, India.
(3) Eman Dawood, King Saud bin Abdul Aziz University for Health Sciences, Saudi Arabia.

Complete Peer review History: http://www.sdiarticle4.com/review-history/74821

ABSTRACT

Background: The first scientific paper reporting children with Angelman Syndrome was written by Dr. Harry Angelman, an English physician at Warrington General Hospital. Based on Dr. Angelman's previous discoveries, Happy puppet syndrome, also known as Angelman Syndrome, was initially seen by Dr. Charles William and Dr. Jaime Frias of the University of Florida Colleges of Medicine. Children with Angelman Syndrome are known for their joyful, energetic demeanor, which includes constant smiling, laughing, hand-wringing, Hyperactivity, a short attention span, and a strong fascination with water are all frequent characteristics. Most of the youngsters who are afflicted also have more difficulties sleeping than usual.

Objective: 1. To assess the existing knowledge regarding Angelman syndrome among nursing students. 2. To assess the effectiveness of planned teaching on knowledge regarding Angelman syndrome among nursing students. 3. To associate difference between knowledge score of nursing students with their demographic variables.

Materials and Methods: A one group pretest and post test research design study will undertaken to assess the effectiveness of planned teaching on knowledge regarding Angelman Syndrome.
among P.B.B.sc nursing students of selected nursing colleges. In this study a total 60 number of students who fulfill the inclusion and exclusion criteria will be included.

Expected Results: There will be significant association between pre-test and post-test knowledge regarding Angelman syndrome among P.B.Bsc nursing students.

Keywords: Assess; effectiveness; knowledge; planned teaching and Angelman syndrome.

1. INTRODUCTION

The first scientific paper reporting children with Angelman syndrome was written by Dr. Harry Angelman, an English Physician at Warrington General Hospital [1]. Based on Dr. Angelman's previous discoveries, Angelman syndrome is another name for happy puppet syndrome, was initially seen by Dr. Charles William and University of Florida Colleges of Medicine's Dr. Jaime Frias [2]. Dr. Harry Angelman documented his young patient's mental impairment, jerky movements, excessive laughter, and atypical physical development for the first time in 1965. Because of their flat heads, he dubbed them "puppet children."

Children with Angelman syndrome are known for their joyful, energetic demeanour, which includes constant smiling, laughing, and hand-wringing [3,4]. Hyperactivity, a short attention span, and a strong. All of these traits are common in people who are fascinated by water. Most of the youngsters who are afflicted also have more difficulties sleeping than usual [5].

Pharmacological aspect: There's no remedy for Angelman condition. Exploration is zeroing in on focusing on explicit qualities for treatment. Current therapy centers around dealing with the clinical and formative issues. A multidisciplinary group of medical care experts will probably work with you to deal with your kid’s condition. Contingent upon your kid’s signs and indications, treatment for Angelman condition might include [6].

Anti-seizure drug to control seizures [7]. Exercise based recuperation to assist with stumbling and development issues. Correspondence gesture based communication and picture correspondence. Conduct treatment to assist with beating hyperactivity and a limited capacity to focus and to support improvement [8].

2. BACKGROUND OF THE STUDY

Ellen Magenis discovered a genetic "marker" for Angelman syndrome. At the Oregon Health Science Center, he is a physician, in the form of a missing genetic coding on chromosome 15. Angelman syndrome affects both men and women equally in India. Angelman syndrome is projected to impact 88,755 persons out of a population of 1,065,070,607 people [9,10].

It includes developmental delays, intellectual disabilities, significant movement and balance difficulties, as well as speech impairment [11,12]. Children with epilepsy frequently have recurrent seizures and have tiny heads. Between the ages of 6 and 12 months, there is a notable delay in development, as well as other early childhood signs and symptoms [13].

3. NEED OF THE STUDY

Angelman syndrome is a relatively well-defined phenotype for an uncommon illness. Despite this, little is known about the unmet clinical requirements and impact of this condition, particularly when it comes to some of the most common clinical symptoms, such as mobility abnormalities, speech difficulty, and sleep problems [14]. Dr. Harry Angelman documented his young patient's mental impairment, jerky movements, excessive laughter, and atypical physical development for the first time in 1965. Because of their flat heads, he dubbed them "puppet children." The rate of missing children is believed to be around 1 in every 15,000 births [15,16].

Nurses play a crucial role as health educator and can spread knowledge to the entire community and should possess knowledge on Angelman syndrome patient and their families are expecting information to be provide for proper decision making and need of guidance and counseling. The knowledge regarding Angelman syndrome is the very essential part of the future nurses as to help parents to make right decision at right time. It can help family planning especially in case of inherited disease, where several children in a family may be affected. Nursing student having insufficient knowledge regarding Angelman. Most responders perceive serious deficiencies in their preparation to care such patients.
3.1 Objective

1. To assess the existing knowledge regarding Angelman syndrome among nursing students.
2. To assess the effectiveness of planned teaching on knowledge regarding Angelman syndrome among nursing students.
3. To associate difference between knowledge score of nursing students with their demographic variables.

4. METHODOLOGY

The study will be based on evaluatory research approach with One group pretest pot test research design. The study will be carried out Smt. Radhakabai Meghe Memorial College Of Nursing Sawangi, Wardha. A convenient sampling technique will be used. Data will be collected from P.B.B.Sc nursing students by self structured questionnaire will be assess the effectiveness of planned teaching on knowledge regarding Angelman Syndrome. After planned teaching the self structured questionnaire will be filled up simultaneously by P.B.B.Sc nursing students.

Ethical approval was obtained from IEC, DMIMS (DU)/IEC/).

Tool description:

The intervention will be plan on giving lesson plan on Angelman Syndrome for 45 minutes. Before that I will take pre-test on Angelman syndrome on P.B.B.Sc nursing students for 30 minutes. I will plan self structured questionaire regarding Angelman Syndrome which will help me to know the knowledge they have regarding Angelman Syndrome. After the planned teaching will be given to P.B.B.Sc nursing students. After 7 days again I will take post-test on same self-structured questionaire which I had given in a pre-test for 30 minutes then I will analysis the data and make the result.

4.1 Inclusion Criteria

- Students who are willing to participate in the study.
- The students who are available during data collection

4.2 Exclusion Criteria

- The students who are sick or absent.

4.3 Sample Size

The study's sample size is 60 students.

4.4 Data Management and Monitoring

The demographic variables are age, gender, source of knowledge. Assess effectiveness of planned teaching on knowledge regarding Angelman syndrome. One group pretest and post-test will be take for study.

4.5 Statistical Analysis

Statistical analysis will be done by descriptive and inferential statistics with the help of SPSS 26.0 software. For assessing the knowledge by descriptive analysis will be used with techniques of standard deviation, frequency mean and mean percentage. Inferential statistics karl pearson correlation coefficient, unpaired "t" test and one way ANOVA will be used to find out associate difference between knowledge score of nursing students with their demographic variables.

5. EXPECTED OUTCOME / RESULTS

The study is planned to assess the effectiveness of planned teaching on knowledge regarding Angelman syndrome among nursing students. There will be significant difference between pre-test and post-test knowledge regarding Angelman syndrome among nursing students.

6. DISCUSSION

This research study will plan to assess the effectiveness of planned teaching on knowledge regarding angelman syndrome among nursing students (PBBSC). This study will be show the difference in pretest and posttest knowledge score. Many people with angelman syndrome have communication problems, which can be caused by linguistic problems or mental impairment. This was a difficulty for our patient. Delayed motor development is prevalent in AS, and jerky motions are the first symptom that parents notice. Parents in our situation detected developmental delays when their child was two years old. Angelman syndrome individuals have been found to have a broad mouth, aberrant teeth, tongue protrusion, and mandibular prognathism, among other facial anomalies. There is some evidence of successful long-term treatment of essential palatal tremor with a rare use [17].
7. CONCLUSION
Conclusion will be drawn from the statistical analysis.

ETHICAL APPROVAL AND CONSENT
This research is endorsed by the IEC, DMIMS (DU)/IEC/). All participants must request that the informed consent be read by participant’s and signed. Prior approval for the study will be taken from institutional ethical committee. Due permission will be taken from concerned authorities of the institutes where study is to be conducted. Informed and written consent will be taken from the samples and identity of the samples will be kept confidential.

COMPETING INTERESTS
Authors have declared that no competing interests exist.

REFERENCES
1. Angelman Syndrome [Internet]. NORD (National Organization for Rare Disorders). [Cited 2021 Jul 23].
Available:https://rarediseases.org/rare-diseases/angelman-syndrome/

2. History – Angelman Syndrome Foundation [Internet]. [Cited 2021 Aug 5]. Available:https://www.angelman.org/about/history/

3. Asperger syndrome | Genetic and Rare Diseases Information Center (GARD) – an NCATS Program [Internet]. [Cited 2021 Aug 5]. Available:https://rarediseases.info.nih.gov/diseases/5855/asperger-syndrome

4. Angelman syndrome: MedlinePlus Genetics [Internet]. [Cited 2021 Aug 5]. Available:https://medlineplus.gov/genes_condition/condition/angelman-syndrome/

5. Angelman syndrome - Symptoms and causes - Mayo Clinic [Internet]. [Cited 2021 Aug 5]. Available:https://www.mayoclinic.org/diseases-conditions/angelman-syndrome/symptoms-causes/syc-20355621

6. Buiting K, Williams C, Horsthemke B. Angelman syndrome — insights into a rare neurogenetic disorder. Nat Rev Neurol. 2016;12(10):584–93.

7. Angelman Syndrome - GeneReviews® - NCBI Bookshelf [Internet]. [Cited 2021 Aug 5]. Available:https://www.ncbi.nlm.nih.gov/books/NBK1144/

8. Seizures: MedlinePlus Medical Encyclopedia [Internet]. [Cited 2021 Oct 7]. Available:https://medlineplus.gov/ency/article/003200.htm

9. Patil M, Telrandhe S, Khatib MN, Bawankule S, Saxena D, Saha S, et al. ARTICLE Page1302 CASE STUDY Improvements in developmental outcomes of an 18-month-old child from Rural Wardha - A Case Study CASE STUDY Medical Science ARTICLE. 2020;24.

10. Angelman syndrome - Diagnosis and treatment - Mayo Clinic [Internet]. [Cited 2021 Oct 7]. Available:https://www.mayoclinic.org/diseases-conditions/angelman-syndrome/diagnosis-treatment/drc-20355627

11. History and Prevalence of Angelman Syndrome [Internet]. [Cited 2021 Aug 5]. Available:https://www.findresources.co.uk/the-syndromes/angelman/history-prevalence

12. Black TN. Communication/educational programs for students with Angelman Syndrome in inclusive classrooms: A look at best practices. 110.

13. Wheeler AC, Sacco P, Cabo R. Unmet clinical needs and burden in Angelman syndrome: a review of the literature. Orphanet J Rare Dis. 2017;12:164.

14. Angelman syndrome. In: Wikipedia [Internet]; 2021. [Cited 2021 Aug 5]. Available:https://en.wikipedia.org/w/index.php?title=Angelman_syndrome&oldid=102783566

15. All about Genetics (for Parents) - Nemours Kidshealth [Internet]. [Cited 2021 Aug 5]. Available:https://kidshealth.org/en/parents/about-genetics.html

16. Angelman Syndrome - Developmental and Behavioral Pediatrics - Golisano Children's Hospital - University of Rochester Medical Center [Internet]. [cited 2021 Aug 5]. Available:https://www.urmc.rochester.edu/childrens-hospital/developmental-disabilities/conditions/angelman-syndrome.aspx

17. Boyd SG, Harden A, Patton MA. The EEG in early diagnosis of the Angelman (happy puppet) syndrome. Eur J Pediatr. 1988;147(5):508–13.