

## TO ASSESS THE EFFECTIVENESS OF SELF INSTRUCTIONAL MODULE (SIM) ON KNOWLEDGE REGARDING HAEMOPHILIA IN CHILDREN AMONG SCHOOL TEACHERS.

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### Conflict of Interest: None

## ABSTRACT

**Background:** Hemophilia is a genetic related disease, there is changes in the gene which might occur during the development in mother's womb or may be passed down from the parents<sup>2</sup>. Hemophilia is a disease where the property of blood clotting factor is hampered. In case of any cut or injury, blood clot helps in stopping the bleeding. There can be a severe bleeding if clotting didn't happen. There can be internal and external bleeding where bleeding occurs inside and outside the body. In hemophilic child one of the most common is internal bleeding of joints (knees, hips etc.).

**Objectives** - 1) To assess the existing knowledge regarding Hemophilia among teachers in school. 2) To evaluate the effectiveness of Self Instructional Module (SIM) regarding Hemophilia among teachers in school. 3) To associate knowledge score with selected demographic variables.

**Methodology** - It is an evaluative approach and it will be conducted among 60 teachers from selected schools in Wardha. Data collection is done by the help of demographic data and knowledge questionnaire. IEC, DMIMS had given approval for the study with reference no. DMIMS(DU)/IEC/2018 - 19/ 7733. After getting the results, conclusion will be made.

**Expected Results:** According to plan, in this study we will be assessing how much knowledge does school teachers gain from Self Instructional Module about hemophilia in children provided to them. The assessment will be done by conducting pre and post - test. It is expected that post – test score will be much higher than pre - test score.

**Keywords** – knowledge, Self-Instructional Module (SIM), Haemophilia,

## INTRODUCTION

In developing countries health education is not given much importance as they are still following the tradition of 'treatment after disease' while healthcare system had put health education in the highest level to fight against chronic illness<sup>1</sup>.

Hemophilia is a genetic related disease, there is changes in the gene which might occur during the development in mother's womb or may be passed down from the parents<sup>2</sup>. Hemophilia is a disease where the property of blood clotting factor is hampered. In case of any cut or injury, blood clot helps in stopping the bleeding. There can be a severe bleeding if clotting didn't happen. There can be internal and external bleeding where bleeding occurs inside and outside the body. In hemophilic child one of the most common is internal bleeding of joints (knees, hips etc.)<sup>2</sup>. The number of the clotting factor in the blood of the person show the severity of the hemophilia in that individual. The less amount of clotting factor it is more likely that the person may have severe bleeding which may cause health problem<sup>3</sup>.

According to the individual's clotting factor level, the sign and symptoms seen in the patient may be different. Bleeding may occur only after trauma or surgery if there is mild reduce of the clotting factor<sup>4</sup>.

## **BACKGROUND OF THE STUDY**

Levels of blood clotting factors can be revealed by the help of blood test in all ages of human being. According to the levels of the clotting factor in the blood, the age when the symptoms of bleeding showed up in an individual may vary. Mild cases of hemophilia may be undiagnosed till adulthood while severe cases are mostly diagnosed during first year of the individual. While some other just found out that they are having hemophilia when they are going through surgery.<sup>4</sup>

Severe cases may be symptomatic at very early age while some other people got diagnosed only when they met with severe trauma or any kind of surgery. Blood test is used to diagnosed hemophilia, to find out whether if there is any problem with the clotting factors and which one is causing the problem.<sup>5</sup>

With the help of research, education and advocacy, The National Hemophilia Foundation (NHF) are taking steps to find out better treatment and cures of this genetic bleeding disease and how to stop the complications.<sup>6</sup>

## **NEED OF THE STUDY**

Teachers in schools are dealing with all the children in the community from different background and also from different family so, it is very important for the teachers to have a clear knowledge about Hemophilia – disease condition and how to give first aid management because a student who is suffering from hemophilia may get injured in the school where teachers are the one to give first aid management.

## **METHODOLOGY**

60 teachers from selected schools in Wardha will participate.

## **INCLUSION CRITERIA**

- Teachers who are willing to participate in the study.
- Teachers who are available at the time of data collection.
- Teachers who can understand and write English or Marathi.

## **EXCLUSION CRITERIA**

- Teachers who have already attended similar type of study.
- Teachers who are health professions.

## **SAMPLE SIZE: 60**

## **RANDOMIZATION**

All the participants will be assigned randomly by sequentially numbered system.

## **INTERVENTIONS**

All the participants will be given proper information about the study and written consent form will be taken before starting the study. Structured questionnaire will be distributed and pre – test knowledge scores will be obtained.

Then, Self-Instructional Module will be distributed to all participants on the same day and Post – test is to be conducted after 7 days.

**Table No-1: Scoring method to assess knowledge regarding hemophilia in children**

Sr. No.	Level of knowledge Score	Score Range	Percentage range (%)
1.	Poor	0-6	0-20%
2.	Average	7-12	21-40%
3.	Good	13-18	41-60%
4.	Very good	19-24	61-80%
5.	Excellent	25-30	81-100%

## DATA MANAGEMENT AND MONITORING

The demographic data will be recorded. Pre- test and post - test will be conducted before and after distribution of Self Instructional Module and the results will be obtained and compare to see the knowledge improvement of school teachers.

## STATISTICAL ANALYSIS

SPSS software will be used for statistical analysis.

## ETHICS AND DISSEMINATION

Institutional Ethics Committee of DMIMS gave approval for the study (DMIMS(DU)/IEC/2018 - 19/ 7733). Proper information about the study will be given to all the participant and they will be requested to go through the consent form and sign on it if they agree to participate.

## EXPECTED RESULTS

According to plan, in this study we will be assessing how much knowledge does school teachers gain from Self Instructional Module about hemophilia in children provided to them. The assessment will be done by conducting pre and post - test. It is expected that post – test score will be much higher than pre - test score.

## DISCUSSION

It is necessary to know about hemophilia in children for the school teachers because some students might have this problem. The researcher wants to make the school teachers aware about hemophilia in children so as to enable them to provide first aid management to students who are having hemophilia in case of any emergency.

A study was done on Knowledge among Mothers' of Children and Youth with Hemophilia – A Cross Sectional Survey at a Hemophilia Center. In this study, 23 mothers and 27 youth who are suffering from hemophilia were participated, they were selected by purposive sampling technique. For data collection, demographic data and questionnaire was used. The study shows that among 50 participants, moderate hemophilia were 42 and severe hemophilia were 8. Moderate knowledge was found among 66.7% youth and 43.5% mothers'. The study concluded that mothers' had less knowledge about hemophilia and it is important to give more education to parents and youth about their disease. Some articles from this region related to child health issues were reviewed<sup>8-17</sup>.

## CONCLUSION

Data will be collected and analysed. From the results found, conclusion will be made.

## REFERENCES

1. Hesham. M.A, Wakhakhny et.al. Impact of health instructions on improving knowledge and practices of hemophilia a adolescents: a single center experience. Available on <https://www.onlinelibrary.Wiley.com/doi/full/10.1111/hae.12431>
2. Genetic, chromosomal and metabolic condition, Hemophilia. Rady Children's Hospital. Available on <https://www.rchsd.org/health-articles/hemophilia-2/>
3. Hemophilia, UC Davis Health. Available on <https://health.ucdavis.edu/hemophilia/bleeding-disorders/hemophilia.html>
4. Hemophilia. UCBC University Cancer and Blood Center. Available on <https://www.universitycancer.com/services/hematology/hemophilia>
5. Hemophilia Diagnosis. UCSF Health. Available on <https://www.ucsfhealth.org/conditions/hemophilia/doagnosis>
6. National Hemophilia Foundation for all bleeding disorders. Available on <https://www.hemophilia.org/About-us>
7. Dsouza Ajalin, Nayak Dinesh, Kurien Annamma et.al. Knowledge among Mothers' of Children and Youth with Hemophilia – A Cross Sectional Survey at a Hemophilia Center. Indian Journal of Public Health Research and Development. 2018; 9(3): 27
8. Balwani, Manish R., Charulata P. Bawankule, Prakash Khetan, and Amit Pasari. "Awareness about Kidney and Its Related Function/Dysfunction in School Going Children: A Survey from the Central India." *SAUDI JOURNAL OF KIDNEY DISEASES AND TRANSPLANTATION* 30, no. 1 (February 2019): 202–7.
9. John, Sally, Samrat Kar, Kanika Kumar, and K. K. Mishra. "Influence of Parenting Style on Behavioural Patterns in Children." *INDIAN JOURNAL OF PSYCHIATRY* 61, no. 9, 3 (January 2019): S410.
10. Mishra, Kshirod K., Sally John, and Naresh Nebhineni. "Autoimmune Neuropsychiatric Disorders of Childhood." *INDIAN JOURNAL OF PSYCHIATRY* 60, no. 5, 1 (February 2018): 31.
11. Khatib, Mahafroz, Mahalaqua Nazli Khatib, Mahjabeen Ahmed, Deepak Saxena, B. Unnikrishnan, Shilpa Gaidhane, Abhay M. Gaidhane, and Quazi Syed Zahiruddin. "Protocol on Causal Chain Analysis and Health Economic Modelling of Childhood Anaemia Interventions in Developing Countries - A Health Technology Assessment." *JOURNAL OF EVOLUTION OF MEDICAL AND DENTAL SCIENCES-JEMDS* 8, no. 51 (December 23, 2019): 3899–3903. <https://doi.org/10.14260/jemds/2019/845>.
12. Khatib, Mahalaqua Nazli, Mahjabeen Ahmed, Deepak Saxena, B. Unnikrishnan, Shilpa Gaidhane, Abhay M. Gaidhane, and Quazi Syed Zahiruddin. "Protocol for a Systematic Review of Effects of Parenting Interventions on Early Childhood Development in Low- and Middle-Income Countries." *JOURNAL OF EVOLUTION OF MEDICAL AND DENTAL SCIENCES-JEMDS* 8, no. 52 (December 30, 2019): 4005–10. <https://doi.org/10.14260/jemds/2019/866>.
13. Khatib, Mahalaqua Nazli, Abhay Gaidhane, Mahjabeen Ahmed, Deepak Saxena, and Zahiruddin Quazi Syed. "Early Childhood Development Programs in Low Middle-Income Countries for Rearing Healthy Children: A Systematic Review." *JOURNAL OF CLINICAL AND DIAGNOSTIC RESEARCH* 14, no. 1 (January 2020): LE1–7. <https://doi.org/10.7860/JCDR/2020/42134.13445>.
14. Khatib, Mahalaqua Nazli, Anju Sinha, Abhay M. Gaidhane, Padam Simkhada, Prakash B. Behere, Deepak Saxena, Bhaskaran Unnikrishnan, Afroz Khatib, Mahjabeen Ahmed, and Zahiruddin Quazi Syed. "A Systematic Review on Effect of Electronic Media among Children and Adolescents on Substance Abuse." *INDIAN JOURNAL OF COMMUNITY MEDICINE* 43, no. S (December 2018): 66–72. [https://doi.org/10.4103/ijcm.IJCM\\_116\\_18](https://doi.org/10.4103/ijcm.IJCM_116_18).
15. Kogade, Priti, Abhay Gaidhane, Sonali Choudhari, Mahalaqua Nazli Khatib, Umesh Kawalkar, Shilpa Gaidhane, and Quazi Syed Zahiruddin. "Socio-Cultural Determinants of Infant and Young Child Feeding Practices in Rural India." *MEDICAL SCIENCE* 23, no. 100 (December 2019): 1015–22.
16. Kuntal, Mohanshyam, and Keerti Swarnkar. "Clinical Profile and Predictor of Adverse Outcome in Children with Acute Encephalitis Syndrome: A Cross-Sectional Study." *JOURNAL OF KRISHNA INSTITUTE OF MEDICAL SCIENCES UNIVERSITY* 9, no. 1 (March 2020): 18–26.

17. Reddy, Sridhar Maryada, and Nareshkumar Satyanarayan Dhaniwala. "Outcome of Surgically Managed Diaphyseal Fractures in Children- A Prospective Study." *JOURNAL OF EVOLUTION OF MEDICAL AND DENTAL SCIENCES-JEMDS* 9, no. 7 (February 17, 2020): 393–97. <https://doi.org/10.14260/jemds/2020/90>.