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Role of Vaccination of School Students and Awareness of Teachers towards Parents with Special Reference to Children with Disability

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Abstract: The research paper states about the topic 'Role of Vaccination of School Students and Awareness of Parents with Special Reference to Children with Disability'. Vaccination can cure infectious diseases, which is essential for all people, including children with disabilities. This paper highlights the importance of teachers' awareness of vaccines and their role in guiding the parents of children with disabilities. For this paper, two objectives and two hypotheses are taken. The two objectives are to study teachers' advice to parents regarding the discussion of a child's disability with doctors, and to ensure that disabled students receive vaccines regularly and on time under the NIS. The hypothesis is that there is no significant role of the teachers in advising the parents for discussion of disability of the child with the doctors, and another is that there is no significant role in ensuring the disabled students get vaccines regularly on time under NIS. The data are taken from high schools, primary schools, and higher secondary schools of different clusters of Kokrajhar district randomly by giving the Google form and visiting different schools for conducting interviews with disabled students. The questions are made up of a Likert model as well as closed-ended ended that are prepared for teachers to know the opinion about the disabled students. The study is quantitative with respect to survey data of teachers' responses. A total of 45 teachers have responded, but in these concerned questions, only 23 teachers have responded. So with the help of the chi-square test, it is trying to find out significant result for this paper. But the obtained result does not refute the null hypothesis. After analyzing the data discussion is made and recommendations and conclusions are given.

Keywords: Disability, Vaccination, Teachers' Awareness

1. Introduction

Children are the future makers of society. There are different students in the schools. There are some students who need special education. Even students who are most talented and considered gifted also need special education. Students who have Orthopedic impairment, deaf and blind, visual impairment, intellectual disability, hearing impairment, language impairment, learning disabilities, autism, brain injury, and multiple disabilities, etc., are considered special children or children with disability. There is no difference in receiving vaccination with respect to special children and normal children. Vaccination can cure infectious diseases, which is essential for all people.

Vaccination is one type of process that is applied to help the development of a man's disease. The biological preparation is the main characteristic that may be provided to acquire the immunization system by curing malignant disease or particular infections, in reducing the disease severity in the body system. In 1900, in the United States, the life expectancy was 47.3 y (Anas E.2012)¹ as mentioned by (Rappuoli R.)². There are some communicable diseases like influenza, pneumonia, tuberculosis, small pox, diphtheria, and measles, typhoid fever, which were the main causes of mortality. Only the antibiotic vaccines and hygiene practices reduced the infectious diseases. At present, life expectancy is found to be 78.7y years, and some non-communicable diseases such as cancer, ischemic heart disease, and stroke are leading death. (Murphy, S.L. et al, 2013)3. Some diseases, like neurodegenerative disease, diabetes, and Alzheimer's, are leading morbidity.

In olden days, vaccinations were provided to the students in the schools to protect them from infectious diseases that can cause body ailments. Even today, the spots of two vaccinations on people's hands have been seen, and they replied to those incidents. But at that time, some students were deprived of accepting that curable vaccine. The main reasons for those students were vaccine phobia, and as a result, they escaped from the schools through the windows. That history can be known from the old people. Vaccination was provided for many reasons. From the historical perspective of the 19th century, for the replacement of various diseases like smallpox, disease, plague, typhoid, cholera, vaccination, which had been helped with preventive measures and not to expansion of such diseases by setting up a vaccination institute in the states of India. The present scenario was seen in respect of the Corona virus that began in 2019, but the discovery of the vaccine saved all people from that endemic disease.

The effort of eradication of smallpox in the country became free during the time of 1977. These Programmes were expanded in 1987, and in India Universal Immunization Programme was launched in 1985. There are some challenges for which the coverage was inequitable in the country. In 1892, the compulsory Act of vaccination was passed in India to ensure widespread coverage in reducing epidemics. When the British were in India, 80% of districts of British India the Vaccination Law was forced which was based on records (Laharia, C,2014, https://PMC, ncbi,

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nlm.nih.govt.)⁴. From the global record, it is known that for only small pox 300 million people were killed in the 20th century. But today, no one dies from smallpox due to the eradication of the virus. At present, the life expectancy has been increasing from 58.5 to 70 on the basis of data from 2010. (Wang H, et al 2012)⁵.

Vaccination is important for adolescent students under (NIS) National Immunization Schedule because it can protect against various infectious diseases that ensure their wellbeing their good health. There are some key points that highlight and importance of vaccination for school students.

Benefits of Vaccination

- Reducing infectious diseases: The step of vaccination helps to prevent some serious diseases, which can cause dangerous, widespread morbidity and mortality
- Timely protection: It ensures that school students are protected from illness from the most vulnerable stage of adolescence
- c) Herd immunity: It can help to achieve herd immunity and contribute to safeguarding all student communities in the prevention of disease transmission. (Pavithra, 2024)⁶

2. Importance of Vaccination for Students with Disabilities:

Vaccination plays a critical role in safeguarding the health and well-being of all children, including those with disabilities. Children with disabilities are often at higher risk of contracting infectious diseases due to underlying medical conditions, compromised immunity, or frequent contact with healthcare facilities (World Health Organization [WHO], 2021)⁷. Therefore, ensuring timely vaccination is not only a public health priority but also a matter of equity and inclusion.

Protection from Preventable Diseases

Students with disabilities may have chronic health conditions such as cerebral palsy, Down syndrome, or respiratory impairments, which can make infections more severe or life-threatening. Vaccination provides protection against diseases such as measles, influenza, and pneumonia, which can have more serious complications in this vulnerable group (Centers for Disease Control and Prevention [CDC], 2022)⁸.

Promoting Inclusive Education

Healthy children are more likely to attend school regularly and participate in academic and social activities. Vaccination helps to prevent absenteeism due to illness, enabling students with disabilities to engage fully in inclusive education settings (UNICEF, 2020)⁹.

Community and Herd Immunity

Vaccinating students with disabilities contributes to herd immunity, reducing the overall spread of infectious diseases in schools and communities. This is particularly important for children who cannot receive certain vaccines due to medical contraindications (WHO, 2021)⁷.

Reducing Healthcare Burden

Vaccinated children experience fewer severe illnesses, reducing hospital visits and medical expenses for families already managing the costs of disability care. This supports both family stability and public health systems (John Hopkins Blooming School of Public Health 2021)¹⁰

Fostering Awareness and Equity

Promoting vaccination among students with disabilities also raises awareness about health equity. Schools and teachers play a key role in ensuring parents understand the safety, necessity, and accessibility of vaccines for all children, including those with special needs (CDC, 2022)⁸.

Teachers' awareness of parents of children with disabilities

Vaccination is one of the most important public health interventions, significantly reducing childhood morbidity and mortality (WHO, 2023)¹¹. However, children with disabilities often face barriers in accessing timely immunization, myths, misconceptions, and a lack of awareness amongst parents, further widening the gap (UNICEF, 2021)¹². Teachers who maintain close interactions with the students and parents can play an important role in bridging the knowledge gap and promoting immunization equity.

3. Teachers' Awareness and Its Importance

Knowledge of Vaccine Benefits

Teachers must understand the protective role of vaccines in preventing life-threatening diseases. For children with disabilities, immunization not only reduces the risk of infections but also prevents secondary complications (O'Leary & Maldonado, 2019)¹³.

Understanding Parental Concerns

Parents of children with disabilities may worry about potential side effects or contraindications. Teachers with adequate awareness can empathize with these concerns and guide them towards credible health information (UNICEF, 2021)¹⁴.

Communication and Guidance

Through parent–teacher interactions, educators can encourage families to adhere to national immunization schedules and promote timely follow-up with healthcare providers (MoHFW, 2022)¹⁵.

Advocacy for Inclusive Health Services

Teachers can advocate for school-based vaccination drives and ensure that these initiatives are accessible to children with disabilities. Such inclusive practices promote equity in healthcare delivery (WHO, 2023)¹¹.

Collaboration with Healthcare Professionals

Partnering with health workers allows teachers to disseminate reliable information, organize awareness sessions, and support parents in making informed vaccination decisions.

4. Objectives of study

- a) To study the teachers' advice to parents for the discussion of disability of the child with the doctors
- b) To study ensuring the disabled students get vaccines regularly on time under NIS.

Hypothesis:

- a) There is no significant role of the teachers in advising the parents for the discussion of disability of the child with the doctors.
- b) There is no significant role in ensuring disabled students receive vaccines regularly on time under NIS.

5. Methods of study

In the present study review of related literature is conducted. Besides these reviews of the literature quantitative study were done by collecting quantitative data from different schools of Kokrajhar district. For collecting data, Google Forms and personal visits to different schools are considered. There are 45 head teachers who have responded to the questionnaire via Google Form. The questions are made as closed-ended and Likert model.

6. Analysis and Interpretation of Data

Analyses are done on the basis of the objectives serially

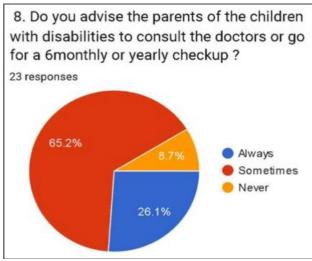


Figure 1

Number of teachers' responses in respect of advice to the parents for the consultation with the doctors in respect of disabled students.

From Figure No. 1, it is found that 26.1% in respect of 'always' for the question 'Do you advise the parents for the consultation with the doctors in respect of disabled students for 6- monthly or yearly checkup.65.2 % is found in respect of 'sometimes' and only 8.7% is found in respect.' never'. On the other hand $\mathbf{x}^2 = \mathbf{i} \mathbf{\Sigma} [(\mathbf{fo} - \mathbf{fe}^2)/\mathbf{fe}]$

Here the df = (c-1) (r-1) = (3-1) (2-1) = 2x1=2, and the value of $x^2=20.21$, but the table value at 05 level is 5.991 if the df is 2. But in the present situation, the calculated value is 20.21, which is greater than the table value. Now it is clear

that the obtained score is not significant and does not refute the null hypothesis with respect to advice to the parents for the consultation with the doctors for the disabled students.

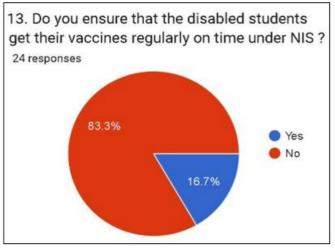


Figure 2

Number of responses of teachers in ensuring the disabled students receive vaccines regularly on time under NIS

From Figure No. 2 The responses have been found in respect of 'yes' 16.7% and in respect of the number of responses, it is found 83.3%. On the other hand x^2 is $\Sigma[(fo-fe^2)/fe]$

And df =1. Because here the df=(c-1)(r-1)=(2-1) (2-1)=1x1=1and the value of $\mathbf{x^2=66.6}$, but the table value at 05 level is 3.841 if the df is 1. But in the present situation, the calculated value is 66.6, which is greater than the table value. Now it is clear that the obtained score is not significant and does not refute the null hypothesis in ensuring the disabled students in getting vaccines regularly on time under NIS that can be acquired by applying a 2x2 fold table and chi- square formula $\mathbf{x^2=2(fo-fe)^2/fe}$ (Garrett, Henry E. 1981, pages 257 and 258)¹⁶.

7. Discussion

The present study emphasizes the importance of vaccination in promoting the health and well-being of school students, with a particular focus on children with disabilities. Vaccination not only prevents the spread of infectious diseases but also reduces school absenteeism and promotes continuity in learning. Children with disabilities are at a greater risk of complications from vaccine-preventable diseases due to underlying health conditions or limited healthcare access (World Health Organization [WHO], 2020)¹⁷. Therefore, ensuring timely vaccination for this group is essential to safeguard their health and to promote inclusivity in educational settings.

An important finding of this study is the role of teachers as mediators between healthcare systems and parents. Teachers are often perceived as trusted figures in society, and their knowledge and attitudes toward immunization significantly influence parental decisions (Oduwole et al., 2019)¹⁸. Teachers with adequate awareness can dispel myths, address parental concerns, and encourage vaccine acceptance. This role becomes even more critical in the case of children with

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disabilities, where parents may express heightened anxiety about the safety and potential side effects of vaccines.

Despite national and global vaccination campaigns, there remains a gap in teacher awareness regarding vaccine guidelines, disability-specific health considerations, and strategies to effectively communicate with parents (Dubé et al., 2015)19. The integration of health education and immunization awareness into teacher training programs could enhance their capacity to guide parents, particularly in communities where misconceptions about vaccination persist.

Misinformation and cultural barriers continue to challenge vaccine uptake worldwide. Social media platforms, in particular, have amplified vaccine hesitancy by spreading unverified claims (Larsonetal.2014)²⁰. Teachers, when empowered with accurate information; can act as frontline advocates to counter such misinformation. Their role in building trust is especially important for parents of children with disabilities, where the decision to vaccinate is often made with greater caution and deliberation.

In alignment with existing literature, this study reinforces the need for collaborative efforts among schools, healthcare providers, and families. Multi-sect oral engagement is essential to strengthen vaccination programs, enhance teacher awareness, and improve parental confidence (Gavi, the Vaccine Alliance, 2021)¹⁴. Such collaboration not only protects children with disabilities but also contributes to overall herd immunity within the school environment.

8. Conclusion

Vaccination is a cornerstone of student health, and teachers play a pivotal role in fostering awareness among parents. Training, sensitization programs, and the inclusion of health promotion in school policies can ensure equitable immunization coverage for all students, particularly those with disabilities. Vaccination is a vital health intervention that ensures the safety, inclusion, and equal opportunity of children with disabilities. A coordinated approach involving parents, educators, and healthcare providers can help overcome barriers such as misinformation, fear, or accessibility issues, thereby protecting this vulnerable group and promoting inclusive educational participation. Teachers' awareness regarding vaccines is vital in ensuring that children with disabilities receive equitable access to immunization services. By addressing parental concerns, encouraging adherence to schedules, and advocating for inclusive health programs, teachers can significantly contribute to reducing health disparities among this vulnerable population.

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