

Assessment of influence of education to parents towards completion of vaccination : A randomised controlled study

¹Juny Sebastian, ²Gurumurthy Parthasarathi, ³Mandyam Dhathi Ravi

¹JSS College of Pharmacy JSS AHER, Mysuru, India

²Pharmacovigilance and Clinical Trials, Botswana Medicines Regulatory Authority, Gaborone, Botswana

²JSS Medical College and Hospital, JSS AHER, Mysuru, India

CONFLICT OF INTEREST STATEMENT

Authors disclose no conflict of interest

BACKGROUND

An effective education provision to parents by health care professionals (HCPs), is one of the major strategies to address the vaccine confidence among the public and lead to a significant improvement in the vaccination coverage of the community.

OBJECTIVE

To assess the influence of education to parents towards completion of vaccination as per Expanded Program of Immunization

METHODS

Study Design: Prospective randomized parallel group study

Study Site: Department of Pediatric, JSS Hospital, Mysuru

Study Period: June 2017- Dec 2018

Study Criteria:

Inclusion Criteria: Parents visiting study site with a child of at least 6 weeks of age

Exclusion Criteria: Parents who are unwilling to take part in the study

Study Method: Enrolled parents were randomized using simple randomization method into intervention and control group after taking the informed consent. Baseline knowledge, attitude and Practice was assessed for both the groups using a validated questionnaire. Intervention group received a structured education and a leaflet on their first visit whereas the control group received only the leaflet. During second visit, test group received the follow-up education and the control group did not receive any intervention. During third visit, KAP was reassessed for both groups. All the enrolled parents were followed until their child became one year two months of age without any further intervention.

Data Analysis: Statistical analysis was performed using independent t-test with the help of SPSS software version 22. Paired t-test analysis was performed to compare the pre and post knowledge, attitude, practice and total KAP.

RESULTS

- ✓ A total of 200 parents were enrolled and were randomized into intervention (n=100) and control group(n=100).
- ✓ 47% were having two children and only 15% having three children.
- ✓ 38% of the parents belong to the socio-economic class of upper middle.

Table 1: Pre and post education scores of the study population

Variables		Intervention group		Control group	
		Mean± SD	P value	Mean± SD	P value
Knowledge score	Before education	11.20 ±4.1	.001	09.46 ± 4.6	.036
	After education	16.98 ±3.6		09.86 ± 3.9	
Practice score	Before education	02.54 ± 0.9	.034	02.24 ± 1.111	.372
	After education	2.77 ± 0.5		02.29 ± 0.9	
Attitude score	Before education	03.42 ±1.0	.001	03.16 ± 1.1	.874
	After education	03.82 ±0.5		03.15 ± 1.0	
Total score	Before education	17.16 ± 5.2	.001	14.86 ± 6.0	0.427
	After Education	23.57 ±4.1		15.30 ±5.9	

Table 2: Comparison of post education scores of intervention and control group.

Variables	Intervention group	Control group	P value
	Mean ± SD	Mean ± SD	
Knowledge score	16.98 ±3.632	09.86 ± 3.935	0.001
Practice score	2.77 ± 0.565	02.29 ± 0.967	0.001
Attitude score	03.82 ± 0.557	03.15 ± 1.009	0.001
Total score	23.57 ± 4.178	15.30 ±5.911	0.001

Parents who were in the intervention group followed the immunization schedule as recommended and their children were vaccinated at nine months with MR/ MMR vaccine and one year with hepatitis A with an average delay of 7 and 5 days respectively from due date. Parents on control group) vaccinated their children at nine months with MR/ MMR vaccine and average delay in immunization was 29 days. and 21% of parents failed vaccinate their children for one year vaccination at the end of the study.

CONCLUSION

The personalized education to the parents by an HCP is a very useful strategy to make the complete immunization of children in the community.

ACKNOWLEDGEMENT

Authors would like to thank the students, staffs and administrators of JSS College of Pharmacy, Mysuru and Pediatric department of JSS Hospital JSS AHER, for the support in completion of the project.