THE EFFECT OF A REMEDIATION PROGRAM FOR DRUG SAFETY IMPLEMENTATIONS FOLLOWED BY NURSES IN OUTPATIENT CLINICS

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Background and Aims

Unwanted events related to drugs occur frequently and can be prevented by adequate precautions. We conducted this study in order to determine the effect of a remedation program for some aspects of safety implementations followed by nurses among outpatient clinics.

Method

We performed a pretest-posttest design, experimental study, including a survey of nurses and a chart review, and a remedation program at 10 pediatric outpatient clinics in a university hospital. The survey for nurses and chart review include questions for drug storage informations including narcotics, labels, emergency cart, verbal medical orders and records. The questions were prepared according to Joint Commission International on Accreditations of Healthcare Organizations (JCAHO) Standards by the researchers. A remedation program was established by multidisciplinary drug safety and management commission of the hospital according to the literature. It involves an electronic drug system for management the drug usage and verbal orders. Pre-posttest were implemented in three different times.

Results

All of the narcotics were locked, ruining was recorded and prescriptions were adequate (table 1). The refrigerator heat was recorded (81.6%) and locked (63.2%), drugs were labeled (%63.2) in most of the outpatient clinics (table 2). Verbal medical order protocol was obeyed (71.1%) and they were recorded (84.2%) by most of the nurses (table 3). After the program was implemented the survey was repeated. The participants demonstrated significantly higher rates to obey the safety precautions after the implementation ($p < 0.05$). Posttest data were collected one month after the remedation programme. According to the posttest results the refrigerator heat was recorded (84.2%) and locked (71.1%), drugs were labeled (%81.6) in most of the outpatient clinics (table 2). Verbal medical order protocol was obeyed (81.6%) and they were recorded (94.7%) by most of the nurses (table 3).

Conclusion

The results suggest that JCAHO drug Safety Event Taxonomy could facilitate a common approach for drug safety information systems. The supervision and digital systems could also facilitate the awareness for the precautions.

Table 1 Status of the nurses' obeying narcotic safety precautions

		Pretests		Posttests	
		n	%	n	%
Locking narcotics	Yes	38	100.0	38	100.0
	No	0	0.0	0	0.0
Adequate narcotic prescription	Yes	38	100.0	38	100.0
	No	0	0.0	0	0.0
Total		38	100.0	38	100.0

Table 2 Status of the nurses' obeying drug storage precautions

		Pretests		Posttests		
		n	%	n	%	p
Adequate storage	Yes	12	31.6	24	63.2	0.00*
	No	26	68.4	14	36.8	
Refrigerator heat record	Yes	31	81.6	32	84.2	0.03*
	No	7	18.4	6	15.8	
Locking refrigerator	Yes	24	63.2	27	71.1	0.00*
	No	14	36.8	11	28.9	
Drug label	Yes	23	60.5	31	81.6	0.00*
	No	15	39.5	7	18.4	
Total		38	100.0	38	100.0	

Table 3 Status of the nurses' obeying verbal medical order precautions

		Pretests		Posttests		p
		n	%	n	%	
Obeying the verbal order protocol	Yes	27	71.1	31	81.6	0.00*
	No	11	28.9	7	18.4	
Recording verbal order	Yes	32	84.2	36	94.7	0.02*
	No	6	15.8	2	5.2	
Total		38	100.0	38	100.0	

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