

Multicenter full-scale simulations in hospital pharmacies to improve disaster preparedness

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RATIONALE

Disaster management in hospital pharmacies is poorly studied and trained.

This study assesses the benefit of full-scale simulations to improve hospitals pharmacists' disaster preparedness.

CONCLUSION

This study highlights the value of full-scale disaster simulations for hospital pharmacies. The number of correct actions increased significantly. Globally, full-scale simulations have improved the preparedness of the hospital pharmacies involved and promoted staff awareness.

METHOD

SCENARIOS

Multidisciplinary working group: creation + validation of scenarios: 1 = major road accident, 2 = terrorist attack

DRILL 1

Full-Scale simulation scenario 1; 1:1; ½ day; surprise; 4 multidisciplinary evaluators; 2 coordinators

IMPROVEMENT

Hot and cold debriefing; creation of a disaster plan if not present and training of employees on it

DRILL 2

Full-Scale simulation: scenario 2; 1:1; ½ day; surprise; 4 multidisciplinary evaluators; 2 coordinators

Details	Quantity: done / not done		Quality: 1 to 5	
	Expected Results	Real Results	Appreciations	Sector
Time: 1:15 p.m. Situation: Exercise Introduction Role: Hospital management, calm Public: Head of Pharmacy Type of communication: By telephone 31074 Message: As for the exercise: The crisis staff informed following the	<input type="checkbox"/> Yes <input type="checkbox"/> No	The leaders must take command	1= Unsatisfactory 3= Good 5=Excellent	Direction Time:
	<input type="checkbox"/> Yes	Informs the team	1 2 3 4 5	Direction Time:

EVALUATION

Harvard model with evaluation grid used to list the expected actions on a quantitative basis and to judge their quality

RESULTS

	Pharmacies results								Averages		
	Hospital A		Hospital B		Hospital C		Hospital D		Ex 1	Ex 2	p value
	Ex 1	Ex 2	Ex 1	Ex 2	Ex 1	Ex 2	Ex 1	Ex 2	Ex 1	Ex 2	p value
Rate of action performed [%]	62	75	66	83	76	91	71	85	69	84	<0.001
Global quality of all actions	2.9	3.5	2.7	3.6	3.3	3.7	3.3	3.7	3.0	3.6	<0.001
Quality of actions performed	4.0	4.3	3.6	4.1	4.0	4.1	4.0	4.1	3.9	4.1	<0.001
Time to gather command group [min]	50	5	No	5	15	5	5	5			
SOP	No	Yes	No	Yes	No	Yes	Yes	Yes			

Ex 1 = drill 1; Ex 2 = drill 2

CHALLENGES

Communication :
→ Structure transmission (reformulation)
→ Setting-up of a management rhythm

IMPROVEMENTS

Full-scale simulation resulted in the creation of a disaster plan in every pharmacy that did not have one

→ Improvement of crisis management

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