IMPROVING PHARMACOLOGICAL TREATMENT: REAL-TIME SAFETY AUDITS

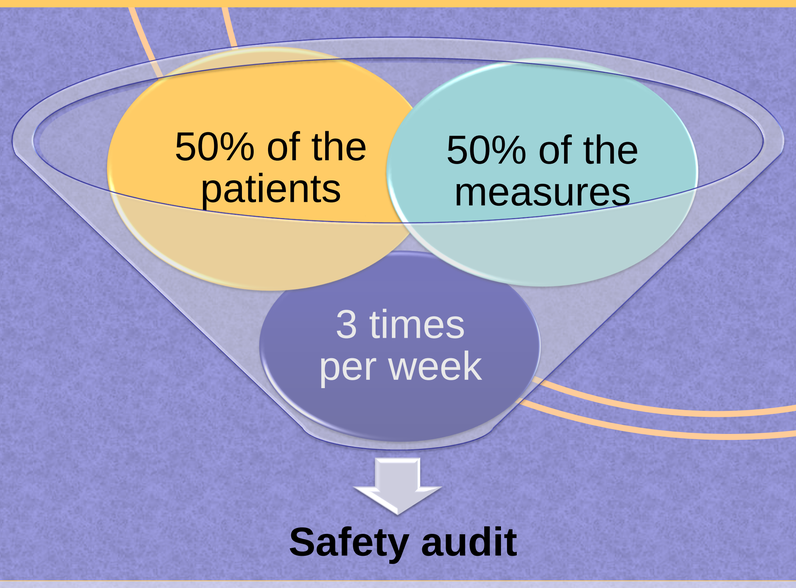
L. Canadell [1], M. Olona [2], G. Sirgo [3], M.C. Gilabert [3], P.A. López [1], M. Martín [1], A. De Dios [1], M. Canela [1], M. Bodí [3].
[1] Pharmacy. [2] Preventive medicine. [3] Intensive care unit. Hospital Universitari Joan XXIII, Tarragona, Spain.

Objectives

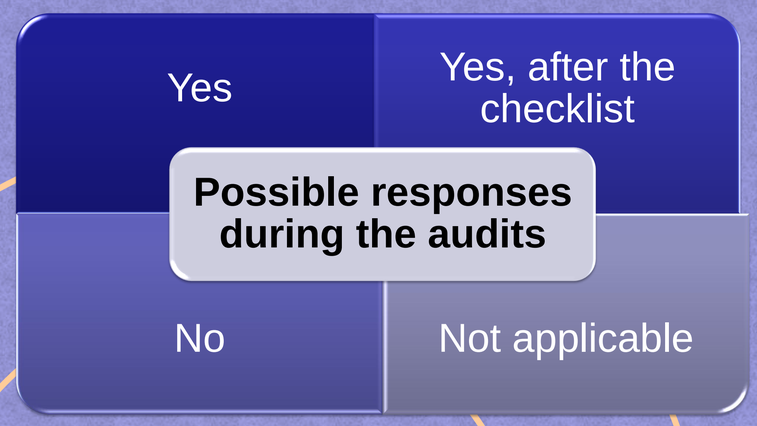
Patients admitted to intensive care units (ICU) are characterized by their need for a more advanced level of care and a higher risk of patient safety-related incidents. Errors in pharmacological treatments may occur due to an unintended act or by omission.

- Present a checklist designed to improve the pharmacotherapeutical care process
- Present the results obtained with this tool in our ICU

Methods

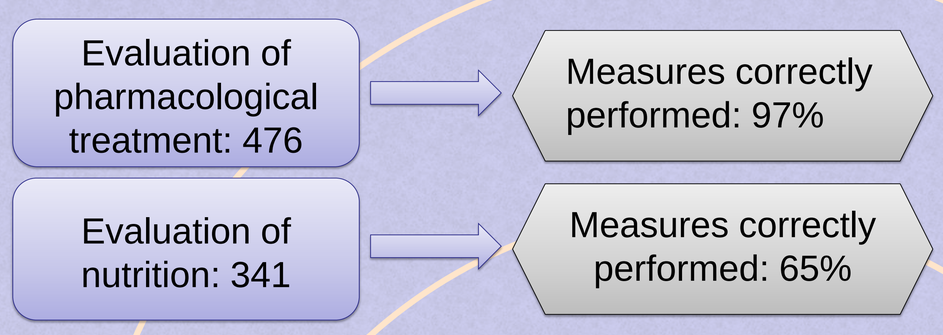


This was a prospective study conducted over a period of **one year** in one adult **ICU** (14 beds). The checklist, consisted of **37 safety measures**, 10 of them focused on treatment.



The evaluated **pharmacological treatment** and **nutritional measures** were: allergies, correct prescription, indication and dosage, verbal orders, prophylaxis of thromboembolic disease, gastrointestinal hemorrhage, glycemic control, antibiotic adequacy, enteral nutrition monitoring and parenteral assesment.

Results



Multivariate analyses didn't demonstrate significant changes in the pharmacological care process when variables were analyzed quarterly, except for **improving lack of verbal prescription** (26% to 2.2% p<0.05) and improving **management of nutrition** (58,33% to 72.62% p<0.05). Furthermore, audits were useful to detect errors of omission and to correct them promptly in 8.3%.

		February – May		June – September		Octubre - Enero		p
Prescribed threatment administred correctly. Verbal orders		Nº	%	Nº	%	Nº	%	<0.0001
	Yes	143	73.71	125	85.62	133	97.79	
	Yes, after	0	0	0	0	0	0	
	No	51	26.29	21	14.38	3	2.21	

		Febrary – May		June – September		Octubre - Enero		p
Enteral nutrition monitoring		Nº	%	Nº	%	Nº	%	0.05
	Yes	91	58.33	69	68.32	61	72.62	
	Yes, after	65	41.67	32	31.68	23	27.38	
	No	0	0	0	0	0	0	

Conclusions

Real-time safety audits in medication help to verify the adequacy of pharmacological orders and can increase safety awareness. The tool has been useful to improve the nutrition management.

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