How pharmacists can act on the weaning of sedatives and opioids in PICU patients?

Implementation of a bundle of action to improve adherence to a weaning protocol for opioids and sedatives in a pediatric intensive care unit: an initiative to improve the quality of care

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- Weaning from sedatives/opioids in the pediatric intensive care unit (PICU) is a complex process.
- A weaning protocol was implemented in 2015 in our institution but recurrent incidents were still reported.

Clinical pharmacy activity
- Coordination of the process
- Development of tools
- Teaching

Interprofessional activity
- Collaboration between clinical pharmacists, nurses, intensivists and other medical specialists

Continuity of care based approach
- Securing the process from prescription to drug administration
- Follow-up from PICU to other units

Patient follow-up after transfer in other units

Algorithm for starting the weaning

Improved electronic medical record:
- Preformedated prescriptions
- Weaning overview
- Integrated withdrawal evaluation scale (SOS*)

*Sophia Observation withdrawal Symptoms-scale

Automated calculations integrated in the weaning plan

One weaning plan for all sedatives and opioids

Weaning plan

Teaching on the weaning process for both nurses and physicians

Pocket booklet for bedside management

Adapted oral solutions compounded by the pharmacy
- Lorazepam 0.2 mg/mL
- Methadone 0.1 & 1 mg/mL
- Clonidine 10 mcg/mL
- Morphine 0.1 mg/mL

Rescue algorithm to manage withdrawal syndrome

Future considerations:
Before-after study to evaluate the impact of the bundle on the length of PICU stay and other clinical outcomes