**Background**

If the PCA pumps allow optimizing the autonomy management of patients' pain and lightening nurse's workload, the ignorance of the system can lead to administration and handling errors. In this context, between 2017 and 2020, 8 repeated adverse event concerning PCAs was reports in our hospital, with a majority of overdose.

In response to these reports, the project was carried out to standardize the prescribing model (paper and computerized) in order to securing the patient health care.

**Aim**

PCA's prescriptions and their monitoring have been assessed in the most users care services of the hospital with the aim to collected a database for analyze.

**Materials & Methods**

The information have been collected among 7 departments in 2021 through a questionnaire completed following the interview of the health executives, main items were:

- Prescribing and monitoring model
- Information on the prescription
- Prescription clarity
- Nurse skills

**Results**

**Main results :**

- PCA prescribing and monitoring model
- Information on the prescription

- 71% (n=5/7) of departments interviewed use a computerized prescription
- Necessary information are missing on these prescriptions:
  - Dilution
  - Section dedicated for programming details
  - Necessity to write a free text

2 departments use a paper prescription that is also used for their monitoring

- Dilution and programming details are present, excepted the background dose
- 2 different models co-exist

71% (n=5/7) of departments use a paper method as monitoring

- 3 departments with a computerized prescription use a paper method to do their monitoring

**Other results :**

- Nurse skills
  - Lack of training sessions → only 1 service had a recent course
- Prescription clarity
  - Only if dilution and programming details of the PCA are completed by the prescriber

**Conclusion**

Most problematic issues identified with this project are the disparity of models and the missing data for a complete and secure prescription. There is a necessity to harmonized the prescription by the establishment of a computer protocol and a unique paper prescription for non-computerized departments.

A working group comprising representatives of the pharmaceutical department, prescribers, health executive and pain-adviser nurses has been set up to work on this issue.

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