

Introducing a clinical pharmacist in a paediatric palliative care unit: how to optimise complex drug regimens



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The paediatric palliative care (PPC) unit aims to provide paediatric patients with the best possible care in the management of their disease to ensure the optimal quality of life.

WHAT WAS DONE?



✓ The pharmacist has joined **the interdisciplinary team** with the aim of improving drug management in both acute in-patient and chronic therapies



WHY WAS IT DONE?

PPC patients are children with chronic or terminal illnesses requiring a high intensity of care. Because of their criticality, a strict clinical monitoring is needed, as well as personalised therapeutic strategies.

For the first time, the clinical pharmacist joined the PPC staff

HOW WAS IT DONE?

✓ A formulary manual for healthcare professionals was drafted, with the description of the crushability of the most commonly used pharmaceutical forms in clinical practice by collecting and keeping up-to-date information from national and international handbooks.

✓ A medication review form has been set up: the most peculiar aspects of the pathological pattern, chronic and as-needed therapy (drugs, food, possible supplementation) were discussed

The pharmaceutical forms most commonly used and manipulated in clinical practice were traced

Information contained in national and international manuals has been collected and kept up-to-date.

A formulation manual for health professionals has been drawn up, describing the crushability or otherwise

Critical issues, i.e. possible interactions, duplicate or potentially inappropriate therapies, were discussed by the multidisciplinary team with the support of the latest medical guidelines.

Collegial reviews of the most critical cases (hospitalised patients or patients with a high pharmacological load) were carried out. The same cases were reviewed at one-month intervals to assess the clinical progress

Procedure for handling - dispersing capsule contents

- Open the capsule and disperse the contents in a mortar or small glass.
- Add about 10 mL of water to the powder and mix thoroughly.
- Aspirate the dispersion with a suitable syringe and administer (via the nutritional probe or by oral administration depending on the patient's condition).
- Flush the route with additional water if necessary to ensure that the probe is completely pervious.

*Use smaller volumes of water in the case of a patient requiring fluid restriction or a paediatric patient



WHAT HAS BEEN ACHIEVED?

Each intervention by the clinical pharmacist was accounted for by means of a specialist consultation attached to the digital medical record, in the form of a report

The Medication Regimen Complexity Index (MRCI) is an instrument that can be used to quantify medication regimen complexity.

Hirsch JD, Metz KR, et al. Validation of a patient-level medication regimen complexity index as a possible tool to identify patients for medication therapy management intervention. *Pharmacotherapy*. 2014 Aug;34(8):826-35.

TIPOLOGIA PRESCRIZIONE(S,H):	ALTRO:	PRIORITA' PRESCRIZIONE(U,B,D,P):	QTA	NOTA
89_01_60 - TELEMEDICINE CLINICAL PHARMACOLOGY CHECK-UP			1	---

QUESITO DIAGNOSTICO: medication review

Initial drug reviews have been carried out for all 169 patients followed by the PPC

MCRI assessment for complex therapies >10 drugs/day and offlabel use

Simplification of treatment regimens with the 37 suggestions given to physicians

Collegial re-evaluations cyclically carried out for the most critical patients (15)

Reducing the risk of interactions and facilitating the management of home therapy

From August 2021



Many galenic formulations have been proposed in order to reduce the crushing of solid forms as much as possible.

AZIENDA OSPEDALE-UNIVERSITÀ PADOVA
PHARMACY

Padua, 04/01/2023

Dear Colleague,
on 14/12/2022 a Pharmacological Review was carried out of the drugs or other products taken self-administered and/or administered by caregivers in the treatment of patient - [Name], [Age], [Sex], from the following information sources:
- discharge letter dated 11/11/2022;
- contact with parents made on 13/12/2022.

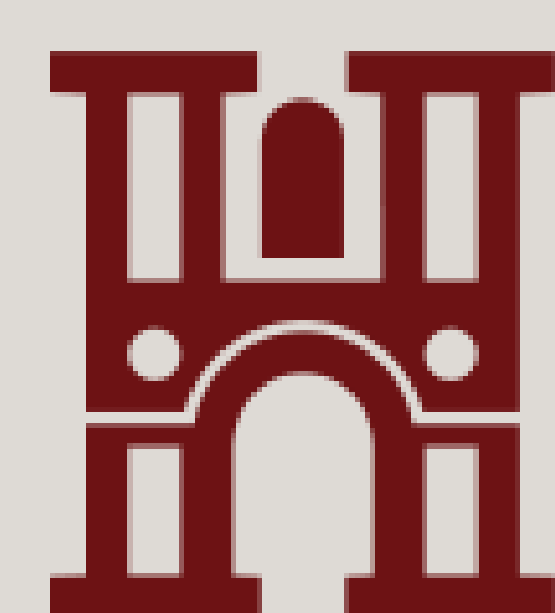
The patient was found not to be allergic to drugs or food.
The Medication Complexity Index (MRCI) was calculated, based on the pharmaceutical form, the dosage frequency and special indications of the drugs taken; the value obtained is: 73.

Possible drug interactions were assessed using Micromedex. Those of contraindicated and/or major degree:
- baclofen and clobazam: increased risk of sedation (major risk)
- baclofen and gabapentin: respiratory depression (major risk)

WHAT NEXT?

Clinical pharmacist's intervention is crucial in the management of terminal or chronic therapies for critically ill patients.

Next step will be the analysis of caregivers' care burden, through a **specific questionnaire** that has already been validated, so as to improve the home management of this particular category of patients.



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