My day with Oncology Pharmacy - Algeria

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1. Introduction

Pharmacists from 22 hospitals answered the 17 questions, 15 of them are university hospitals. Their answers represent the acutal situation in ALGERIA. At the moment, pharmacists covering the oncological production have no additional activities on the ward. They have to invest nearly their full working capacity into the manufacturing and logistical process of cytostatics. Patients care is mainly covered by special clinical pharmacists.

2. Material and method

Up to 17 questions covered the following fields: **Profession, workplace and Coverage of working field as:** *Manufacturing patent specific infusions, Number of produced medications per day, Validation of prescription from physicians, Form of prescription (electronically or paper based by email, fax, telephone call…), Release of produced medications, Pass on materials into work space, Usage of the ESOP database for oral drugs, Patient consultation in medical properties, side effects and setting up medication schedules, Invested working hours in oncological activities.*

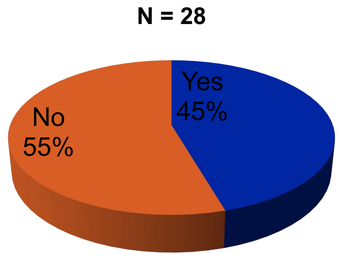

Fig.1: Preparation of patient-specific infusions

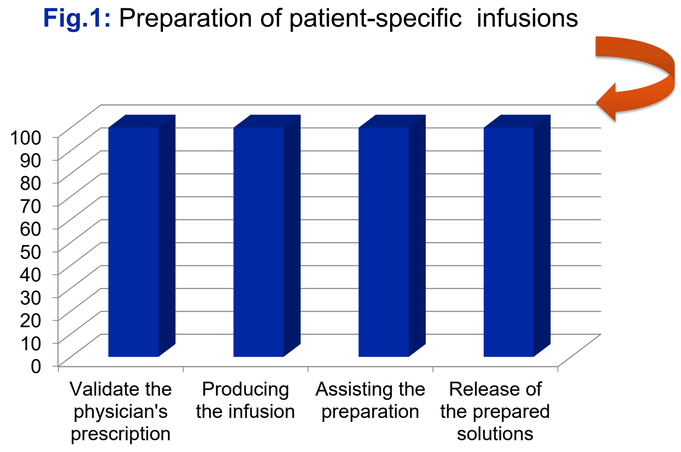

Fig.2: Activities performed by pharmacists preparing patient-specific infusions

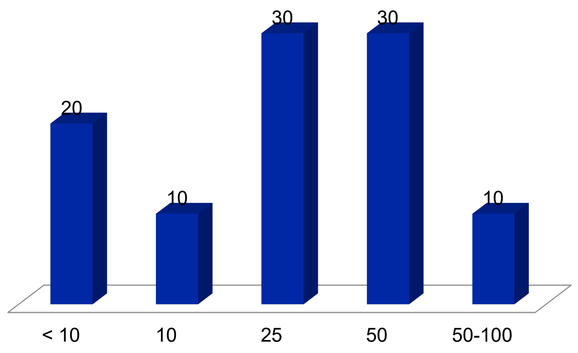

Fig.3: Average number of prescription and manufactures per day

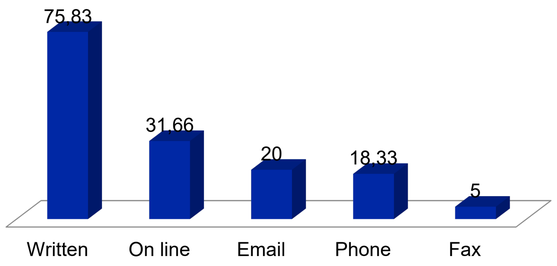

Fig.4: Type of prescription received

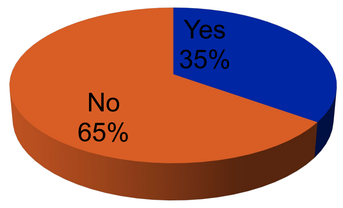

Fig.5: Providing patients with oral cancer medication only

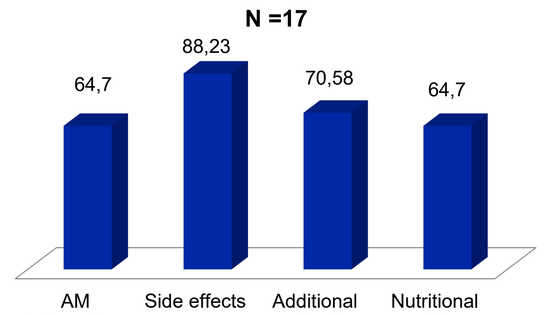

Fig.6: Providing patients with instructions how to handle the cytotoxic drugs

3. Results and discussion :

1. Working conditions : Twenty eight responses were obtained from pharmacists working in 22 different hospitals. *Only 10 from 22 hospitals manufacture oncologicals mainly by gravimetric procedure.* This indicates that less than half of the hospitals have the infrastructure and capacity required to produce these specialized medications. Additionally, although prescriptions are validated and medications released by pharmacists in all hospitals, direct patient contact remains limited (5 hospitals). Only 4 hospitals offer personal consultations, suggesting a need to enhance pharmacists' involvement in the clinical follow-up of oncology patients. *However, 17 hospitals provide instructions on handling cytotoxics and offer advice on side effects, complementary medications, dietary advice, and drug information respectively.* This highlights the important role of pharmacists as educators in oncology treatment. *A total of 8 hospitals report providing only oral anticancer drugs with a high frequency per week. These are ordered directly from wholesalers. The staff spends an average of 4.34 hours per day in the oncology pharmacy.*

2. Number of produced IV medications : The daily production of IV medications varies significantly across hospitals. One hospital has a daily production capacity between 50 and 100, while the majority produce fewer than 50, and some only up to 25 or even 10. This variation could be related to the size of the hospitals, the available resources, or the number of patients treated. Hospitals with lower production might be limited by human or material resources, which could impact their ability to meet patient needs.

3. Form of prescription : The adoption of electronic prescriptions remains limited, with only 4 out of 22 hospitals using this system in 25% of cases. The majority of hospitals (75%) still rely on paper-based prescriptions. This dependency on paper may slow down the validation and manufacturing processes of medications and represents a key area for future improvement, particularly in terms of safety, efficiency, and traceability of prescriptions.

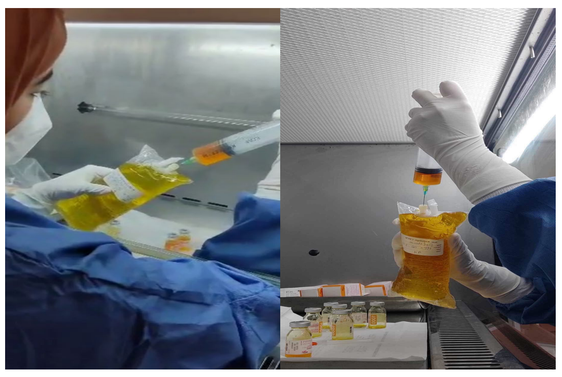

Fig.7: Preparation of patient-specific infusions

Fig.8: Conciliation in heamatology for a patient who has undergone a bone marrow transplant.

Conclusion

These results reveal several areas for development to enhance pharmaceutical services in oncology. Expanding direct patient contact, increasing the capacity for producing oncological drugs, and broader adoption of electronic prescriptions are priority objectives.To bring the production experts tighter to the ward, to enable dialogs with physicians and care unit and to avoid long tranportation, more and more hospitals directly integrate the production module into the oncological outpatient unit. This will make it possible that oncological pharmacists can combine clinical and manufacturing aspects of the therapy. They also need training, such as specific EUSOP training, as well as training for preparers and nurses, who are a crucial part of the circuit.

Contact

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References

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