Project title

Application of IT registration system in symptoms control in Palliative Care Department in ZNA Middelheim, Antwerpen, Belgium

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**Project topic**

Trying to assess the effectiveness, efficacy and satisfaction of patients, their families and staff of the Palliative Care Department in improving cancer symptoms control and fall prevention by IT registration system in ZNA Middelheim, Antwerpen, Belgium.

**Introduction**

During my training in medical oncology at the University Hospital in Poznań, Poland, I have been working for almost three years in the oncology department where there are not only people having chemotherapy treatment but also palliative care patients.

The ESMO grant enabled me to spend 3 weeks in the Palliative Care Department at ZNA Middelheim, Antwerpen, Belgium and to learn more about symptoms control and fall prevention in palliative care patients; I was also able to observe and to participate in the organization of palliative care.

As soon as I arrived in Belgium, I instantly felt like I had become a member of the oncology staff. During the first days, with the help of my Supervisor Dr. Dirk Schrijvers, I was able to observe and take part in all the department activities. I participated in rounds, consultation of oncology patients and the activities of the nurses of the palliative care unit. I was also able to observe the supporting team of palliative care or to take part in multidisciplinary team meetings.

**Goals or aims**

There is a growing number of cancer patients in the last years. So cancer symptom control and fall prevention becomes an important problem for palliative care patients. The people approaching end of life should be able to have a good experience in the control of symptoms and avoidance of falls without suffering.
The purpose of the study was to assess the effectiveness, efficacy and satisfaction of patients, their families and staff of the Palliative Care Department in improving cancer symptoms control and fall prevention by IT registration system in ZNA Middelheim, Antwerpen, Belgium.

METHODS

The study evaluated symptoms such as pain, dyspnoea, fear and nausea control and falls prevention in patients hospitalized at the Palliative Care Department at ZNA, Middelheim Antwerpen, Belgium. At the beginning patients' complaints were registered by patient-reported numeric scales from 0 to 10 by ESAS (Edmonton Symptom Assessment Scale). Scores greater or equal to 5 in a scale of 0 to 10 were considered as severe and the patient then received an extra dose treatment. Unfortunately this system was not always adequate. Nurses put scores on the evaluation form, but it is difficult to retrospect any information about general state of the particular patient or palliative care patients.

IT registration system as an electronic system was organized to monitor cancer pain, dyspnoea problems, nausea control and fear. The symptoms were registered three times a day and stored in the data system. All registrations are related to a specific patient. More over patients can indicate worsening of the symptom and can request if they wish for nursing intervention.

Nurses are also informed by the IT registration system if the patient tries to leave bed without the nurse's knowledge so the staff could prevent falls. Generally the system should increase the patient's care.

Description of the time spent at host institute

During my staying at ZNA Middelheim I was able to observe the beginning of the organisation of the IT system registration in the Palliative Care Department. The system was there to be a help for patients and for the medical staff.

Fall prevention.

The fall prevention system is a very good idea. In my observations I noticed that several times during the night, patients left the bed (e.g. for the toilet) without informing or asking a member of the medical staff for assistance. Usually palliative care patients are weak but they wish to keep their autonomy so they decide to leave a bed on their own. This is the easiest way to fall down causing fear, wounds or bone fractures. The IT capturing system was organize to inform the medical staff the moment a patient’s leg touches the floor during the night. Nurse could go directly to the patient's room to help him/her to get up, walk to toilet and by that preventing the patient’s from falling. The system is useful during the night when most of the patients are under insomniac’s drugs; they can be confused and not well oriented about their situation. During the day most of the patients are active, they have visitors and there are many medical staff available so the falls prevention system does not seem to be necessary.

IT symptom control registration system

Each of the palliative care patients received a screen with 4 symptoms written: pain, dyspnoea, nausea and fear. Three times a day plus in acute situations the patient can touch the symptom on the
screen indicating the intensity of the symptom in a scale from 0 to 10. The nurses are informed if the scores are greater or equal to 5 so they can commence the protocol procedure. In the IT registration system it is also possible to ask for the nurse, independently on symptoms intensity. The goal of the system is to obtain whole day symptoms (pain, nausea, vomiting, fear) registration, to observe the intensity of the symptoms during the day and night, to indicate the situation when the patient could feel the pain but would not ask for an extra dose of medication.

Unfortunately I also have some critical findings. Some of the palliative care patients are people over 70 years old so they can have difficulties in dealing with computers. Most of them are weak so they can have trouble with holding a screen and touching buttons. More over the screen and letters can be too small for patients with visual problems. The system is not quick enough for acute situation so if the patient feels really bad, he should use a traditional beep to inform the nurse about the worsening of the symptoms. But in that situation symptoms will not be registered in the IT registration system. There is a danger that the IT registration system will not be perfectly describing the patient’s status during 24hours observation.

There is also problem with locking the screen against robbery.

**Conclusion**

Nowadays there are more and more difficulties in organizing a fully occupied nursing team. It is obligatory to find the solution that the nurse will be informed about all patients’ symptoms and the patients will be safe in symptoms control and fall prevention. IT registration system seems to be a part of such situation; it appears to be successful in rapid answering of patients’ information and improving quality of Palliative Care System, but a further study and evaluation needs to be completed.

During my stay in the Palliative Care Department I was also able to obtain some ideas regarding aromatherapy in looking after palliative care patients; aromatherapy is something new for me. I learnt that Tea Tree aromas are good for herpes infection. A bath with Tea Tree aromas can be helpful for muscle pain. Pepper mint is good in the case of headaches. Lavender aromas are good for relaxing; it is also good to use lavender drops during massage to prevent bed-sores. Rose aromas are usually used when patients are dying. You can put some drops of rose aromas on the pillow around the patient’s head to calm the situation down, to make silence easy. Lemon aromas can be used to avoid bad smells.

The message for me to take home was ideas for fall prevention in patients who are not strong enough to mobile on their own, but who want to be self-independent in the situation when they should ask for a help especially during the night.

The second message to take home is trying to use aromatherapy for palliative care patients. During my stay in ZNA Middleheim, I also took part in preparing the scientific article about the subjects mentioned above.
At last, but not least I would like to thank ESMO and Dirk Schrijvers for the chance of my fellowship at ZNA Middelheim, Antwerpen, Belgium and in obtaining new ideas which are of help to me and my patients and will improve my oncological activities in Poland.