PAIN CORRELATES WITH CONSTIPATION AND ANXIETY-DEPRESSIVE DISORDER ON THE ADMISSION TO PALLIATIVE CARE AND MIGHT BE A FACTOR PREDICTING THE NEED FOR EXTRA RESOURCES.

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Introduction

Clinical assessment of pain and the accompanying symptoms on the admission day may provide important data for the resources and measures planning, identifying additionally burdensome conditions, and furthermore for disease pathways evaluation.

Materials and Methods

The data were collected with a structured questionnaire that included information on general conditions, urgent states, and symptoms, and was developed by the expert team as a tool for the optimal qualification of patients to the palliative care in Poland. Each patient was assessed using this questionnaire on admission.

P < 0.05 was assumed for statistical significance.

Results

158 patients were assessed in 5 palliative care centers on the admission day, and 1 patient was excluded from the analysis due to uncertain data quality. 154 were cancer patients.

The average age was 70.5 years (range 32.3-95.8), 50.3% were women. 86% of the patients suffered from pain. The mean pain intensity was 1.64 in [0-4] scale and was higher in men (1.87 vs. 1.42; p=0.032). It was the only difference between men and women for all variables analyzed.

Pain intensity was positively correlated with constipation. Constipation may result in increased pain intensity in the abdomen or pelvis. It is also likely that patients suffering pain received opioid analgesics, which in turn made them constipated.

There was also a positive correlation between pain and the anxiety-depressive disorder (ADD), which may result from somatization of ADD in the form of pain, as well as from the influence of pain on mood.

Pain appeared negatively correlated with age. Pain intensity was higher in patients <70 years of age.

No correlation between pain and other symptoms was found.

Some other symptoms are also correlated with each other and allow for creating clusters of symptoms for better estimation of the expected resource burden.

Limitations of the study

The exclusion of one questionnaire in the process of data audit made a correlation between pain and nausea/vomiting insignificant, with inconsiderable impact on other results. So we decided to regard the results for this correlation as uncertain, withdraw from this report, and plan additional research to confirm it.

Conclusions

Pain correlates with constipation and anxiety-depressive disorder. Its occurrence and intensity, on the day of admission, especially in men and younger patients, may be a predicting factor of additional resources allocated. It may support an argument for the differentiation of subgroups in the health systems based on the Diagnosis-Related Groups. Additional research is necessary to confirm the correlation between pain and nausea/vomiting.

	ECOG	Age	Pain	Cachexia	Dyspnea	Cough	Dysphagia	Nausea and vomiting	Constipation	Persistent hiccup	Exudation or edema	Lymphatic edema	Bedsore	Cancer ulceration	Pruritus	Anxiety/Depression
ECOG	1.00	-0.07	0.03	0.34	0.09	-0.04	0.29	0.12	0.12	-0.07	-0.02	-0.10	0.22	0.05	-0.01	0.22
Age	-0.07	1.00	-0.24	-0.01	-0.10	-0.13	-0.15	-0.17	0.01	-0.14	0.12	0.04	0.13	0.00	0.00	-0.13
Pain	0.03	-0.24	1.00	0.08	0.12	0.09	0.13	0.12	0.21	-0.07	-0.04	0.00	-0.12	0.03	-0.04	0.19
Cachexia	0.34	-0.01	0.08	1.00	-0.03	0.03	0.19	0.05	0.00	-0.06	-0.03	-0.10	0.03	0.03	-0.09	0.20
Dyspnea	0.09	-0.10	0.12	-0.03	1.00	0.49	0.28	0.18	0.24	0.02	0.30	0.07	-0.11	-0.10	-0.03	0.11
Cough	-0.04	-0.13	0.09	0.03	0.49	1.00	0.11	-0.11	0.22	0.04	-0.03	-0.07	0.02	-0.06	-0.04	0.02
Dysphagia	0.29	-0.15	0.13	0.19	0.28	0.11	1.00	0.20	0.13	0.06	-0.04	0.06	0.06	0.15	-0.09	0.17
Nausea and vomiting	0.12	-0.17	0.12	0.05	0.18	-0.11	0.20	1.00	0.20	-0.03	0.08	-0.03	-0.21	0.00	0.11	0.14
Constipation	0.12	0.01	0.21	0.00	0.24	0.22	0.13	0.20	1.00	-0.10	0.19	0.01	-0.04	-0.04	-0.09	0.18
Persistent hiccup	-0.07	-0.14	-0.07	-0.06	0.02	0.04	0.06	-0.03	-0.10	1.00	-0.03	-0.01	0.00	-0.09	0.05	-0.06
Exudation or edema	-0.02	0.12	-0.04	-0.03	0.30	-0.03	-0.04	0.08	0.19	-0.03	1.00	0.31	-0.13	-0.21	0.12	-0.02
Lymphatic edema	-0.10	0.04	0.00	-0.10	0.07	-0.07	0.06	-0.03	0.01	-0.01	0.31	1.00	0.01	0.15	0.04	0.02
Bedsore	0.22	0.13	-0.12	0.03	-0.11	0.02	0.06	-0.21	-0.04	0.00	-0.13	0.01	1.00	0.13	0.03	0.04
Cancer ulceration	0.05	0.00	0.03	0.03	-0.10	-0.06	0.15	0.00	-0.04	-0.09	-0.21	0.15	0.13	1.00	0.14	-0.07
Pruritus	-0.01	0.00	-0.04	-0.09	-0.03	-0.04	-0.09	0.11	-0.09	0.05	0.12	0.04	0.03	0.14	1.00	-0.16
Anxiety/Depression	0.22	-0.13	0.19	0.20	0.11	0.02	0.17	0.14	0.18	-0.06	-0.02	0.02	0.04	-0.07	-0.16	1.00

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