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Positive Quality Intervention: Cancer Pain

Description: Cancer pain is a condition directly linked to the disease itself. This aspect of cancer, and its therapy, is usually the one that is most distressful for the patients and their loved ones as well as their care givers. Therefore, addressing this issue aims to improve the condition not only for the patients, but also for their surroundings.

Background: Cancer pain is one of the defining factors of quality of life during cancer treatment. Its cause may be the malignancy itself and its interference with the physiological procedures of the person, side effects that originate from various therapeutic approaches such as surgery, chemotherapy and radiotherapy or conditions that are indirectly related to the condition. The prevalence of cancer pain increases with the stage of the disease and varies between 15% in the early stages and 75% in the latter ones.¹ Granted the effect that pain has on the patient's overall wellbeing and productivity, it comes as no surprise that there is great interest in combating it. Current therapies, although proven effective in mitigating the condition, leave a lot to be desired. Common concerns when using opioids include long term addiction to medicines, even after the therapeutic cycle has come to term, significantly altered mental and behavioral state and complications in ventilation and perception of pain. On the other hand, non-opioids also pose the risk of toxicity and adverse effects, mainly on the GI and Cardiovascular system. Currently, these points are mitigated via the balancing of risk and reward through careful selection of dosage, plan of treatment, as well as alternative approaches. Focusing on healthcare professionals, issues that may interfere with cancer pain progression and treatment are lack of empathy & understanding, long-term complications of a proposed treatment, as well as regulatory barriers that limit the number of treatment options.²

PQI Process: Overall, studies demonstrated positive effects of healthcare providers' involvement in cancer pain management, especially in reducing pain intensity, adverse drug reactions (ADRs) and improving quality of life. Positive Quality Interventions (PQIs) include:

- Medication review: Definition: structured, critical examination of a patient's medicines with the objective of reaching an agreement with the patient about treatment, optimizing the impact of medicines, minimizing the number of medication-related problems and reducing waste
 - AD-HOC: isolated question to a patient
 - Prescription review: technical review of list of patient's medicines by a pharmacist
 - Treatment review: cooperation between the pharmacist and prescriber, to review the patient's medicine with their full notes
 - Clinical medication review: face-to-face cooperation between the pharmacist, prescriber and patient, to review the patient's medicine with their full notes
 - For sick, less mobile patients, the medication review takes place at home, however results can be biased
- Pain assessment
 1. Edmonton Classification System for Cancer Pain (ECS-CP) achieves adequate pain control according to mechanism of pain, incident pain, psychological distress, addictive behavior, cognitive function

IMPORTANT NOTICE: NCODA has developed this Positive Quality Intervention platform. This platform is intended as an educational aid, does not provide individual medical advice, and does not substitute for the advice of a qualified healthcare professional. This platform does not cover all existing information related to the possible uses, directions, doses, precautions, warning, interactions, adverse effects, or risks associated with the medication. The materials contained in this platform do not constitute or imply endorsement, recommendation, or favoring of this medication by NCODA. NCODA does not ensure the accuracy of the information presented and assumes no liability relating to its accuracy. All decisions related to taking this medication should be made with the guidance and under the direction of a qualified healthcare professional. It is the individual's sole responsibility to seek guidance from a qualified healthcare professional. *Updated 12.19.23*

2. Cancer Pain Prognostic Scale (CPPS) predicts the likelihood of pain relief for cancer patients with moderate to severe pain.
- Pain management, according to the European Association for Palliative Care (EAPC) and National Comprehensive Cancer Network (NCCN) guidelines:³⁻⁴
 1. Non-opioid analgesics for mild pain: Acetaminophen or Paracetamol
 2. Weak opioids for moderate pain: Codeine, Tramadol, Hydrocodone, Oxycodone, Morphine, Hydromorphone in combination with non-steroidal anti-inflammatory drugs (NSAIDs) or use of strong opioids in low doses
 3. Strong opioids for severe pain: Morphine, Oxycodone, Hydromorphone, Methadone
 - Adverse Drug Reactions (ADRs) detection and management: ADRs include constipation, nausea, vomiting, fatigue, alopecia, drowsiness, myelosuppression, anorexia, dermatological reactions, mucositis, diarrhea and require changes to medication regimen in dosing and pharmacotherapy choice
 - Non-pharmacological interventions include aromatherapy massage, physical therapy, transcutaneous electrical nerve stimulation, reflexology, acupuncture and cognitive behavioral strategies such as relaxation, distraction and imagery exercises
 - Effect of each intervention remains unclear and further studies are required to determine the effect of each intervention separately¹⁻¹⁰

Patient-Centered Activities:

- Patients can receive advice within community pharmacies, Medically Integrated Pharmacies, hospitals, hospices
- Consultations before and after intervention for knowledge and quality of life (QOL)
 - Emotional support and facilitation of adjustment
 - Information about physical state
 - Practical advice
- Psycho-oncology videoconference counselling leads to greater efficiency, punctuality, time saving, and lower cost, compared to standard in-person visits
- Instructions in verbal, written, computer form or audio/video for patients with cancer pain; these include instructions on the administration of opioids such as methadone etc
- According to a British study, 137 of the 226 (61%) of patients had a significant need for further information about their medication 10 days after prescription¹³
- Daily follow-up telephone consultations after treatment initiation, to adjust the dosage, recommend other over the counter (OTC) medicines and manage side effects
- Greater knowledge of cancer pain leads to reduced pain intensity, slightly higher patient satisfaction
- According to questionnaires, patient knowledge increased post educational intervention¹⁴⁻¹⁵
- Evidence also found an improvement in patient satisfaction, QOL and a reduction in side effects⁹⁻¹⁶

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