Knowledge, Attitude and Practice associated with cancer Pain Management for oncology Hospitalized Children among Nurses Working in Nablus CityHospitals: Cross-sectional Quantitative Study

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### Introduction

# 1.1 Background

Pain is considered to be the fifth vital sign for patients in hospitals, and is often the main cause and complain that drives the patient to visit the physician. In the United States, the Institute of Medicine states that the estimated lost work-time is 50 million days and 61.2 billion dollar each year. Pain is a protective response that alerts the body for a possible damage, and it is perceived in a nociceptive form in fetus and newborn stages of human more than from a sensation or emotional reaction, and it imposes a significant burden in a clinical, social and economic way (Dinakar and Stillman, 2016). Pain has several definitions, but the most common is the definition of International Association of the Study of Pain (IASP), which is "unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage" (Horgas, 2017).

Studies show that pediatric pain should be differentiated from other patients of different age groups, because of the different expression of it, as children mostly are not able to quantitatively or accurately describe pain characteristics, like severity, quality, radiation, ... etc. unless with the help of their main care provider or parents (Alotaibi et al., 2018). Pain is addressed by around 15% of pediatric visits to the hospital or physicians, either by themselves or

their care provider, and is mostly reported in obese, female adolescents, and is mostly located in abdomen, extremities, ear or nose and throat area (Grout et al., 2018).

As nurses are the first health care provider (HCP) and the most who spends time with pediatric patients, the nurse has to have an adequate, and sometimes exceptional, pain assessment and management skills, and this comes mainly from the high level of knowledge among nurses about pain pathogenesis, signs and symptoms and its differentiation among pediatric patients, as well as different pharmacological and nonpharmacological management plans (Salameh, 2018). In general, knowledge regarding pain management highly varies between nurses according to different factors, like patient's age, type of institution that the nurse work at and pain management protocols in his/her hospital. Moreover, there are a lot of barriers that can affect pain management among nurses, some of them are related o medical staff, like inadequate communication skills with patients or experience on pain control, while some are related to the patient, like reluctance to report pain or take opioids, or insufficient pain control knowledge, and some are related to health care system, like strict regulation of opioids or medication and intervention costs (Toba et al., 2019). Focusing on nurses' role in pain management, variety of studies report lack of knowledge among nurses regarding pain assessment and management in different patients' types.

Nurses need to receive sufficient and continuous education regarding pediatric pain management. Some studies proposed and used a recommended outline for education on pediatric pain. It starts with an introduction to the significance of pain management in pediatric patients, then a brief physiology of pain, with focus on specific pain types and causes among children, and also including pain assessment strategies and tools, like FACES pain tool and self-reporting pain. It also contains a review of pharmacological management of pediatric pain, including available analgesia, medication administration and calculation and considerations to their side effects. Lastly, nonpharmacological management teaching part includes cognitive-behavioral therapy, distraction play, environmental change, music and massage. This outline is based on the recommendations of World Health Organization (WHO) and IASP, and can be used for pre-post studies to investigate its efficacy in improving nurses' level of knowledge (Lunsford, 2015).

In Palestine, Salameh (2018) concluded that nurses have insufficient level of knowledge regarding pain assessment or management among patients in general, where it was between

17.1% and 74.8% regarding different aspects of pain. On the other hand, another Palestinian study by (Bajjali, 2019) reported that nurses say there is no pediatric pain management protocols in around 50% of their settings. Moreover, regarding nurses' knowledge of their pain assessment and management, majority of nurses had less than satisfying level of knowledge, with different aspects in pain that have wrong or misleading knowledge among nurses.

#### 1.2 Problem Statement

cancer Pediatric patients have their own pain pathogenesis because they do not express their pain or feeling in the same way as adults, and thus nurses need to have more experience in the assessment of their pain from qualitative and quantitative perspectives, and some studies also conclude that pain in childhood stage may predispose adult pain if not treated accurately (Dinakar and Stillman, 2016). Pain in Cancer pediatric patients also have a burden on their families, rather than their own academical, social or physical burden.

Different studies also stated that nurses have a deficit in their level of knowledge, attitude and practice regarding oncology pain assessment and management, and this deficit is related to several factors and may lead to variety of consequences on the child or his/her family (Alotaibi et al., 2018). In Palestine, there is a lack in the number of enough studies to support or oppose these findings, but the available studies also state an unacceptable level of knowledge regarding pediatric pain management (Bajjali, 2019). Also, there are cultural differences between children and their environment in West Bank and in Jerusalem where the previous study was conducted, and these cultural differences my affect how children can express their pain according to the difference in stressors and other factors. Lastly, there is a lack of studying the level of practice among Palestinian nurses in the previous study, and thus we aim to overcome this by studying level of practice among West Bank nurses, as well as over different age groups of pediatric.

### 1.3 Significance of the Study

Oncology Pain management and increased knowledge among nurses about efficient pain management is related to decreased level and quantity of pain among patients in general, and pediatric patients without exclusion. This study will provide the medical and nursing field in Palestine with up-to-date findings regarding how much Palestinian nurses have knowledge about pain management in pediatric patients, as well as a quantitative measurement of their attitude and

practice toward oncology pediatric pain management. These findings can be utilized for further studies and research in order to finds several pharmacological or nonpharmacological solutions to manage pediatric pain in different inpatient and outpatient settings.

# 1.4 Aims of the Study

The study will try to achieve the following aims:

- 1- Investigate level on knowledge among Palestinian nurses regarding cancer pediatric pain management in Nablus hospitals.
- 2- Investigate Palestinian nurses' attitude and practice regarding cancer pediatric pain management in Nablus hospitals.
- 3- Investigate the most common factors that are related to Palestinian nurses' level of knowledge, attitude and practice toward cancer pediatric pain management in Nablus hospitals.
- 4- Investigate the most common barriers of efficient cancer pain management for pediatric patients among Palestinian nurses in Nablus hospitals.

# 1.5 Questions of the Study

The study will try to answer the following questions:

- 1- What is the level on knowledge among Palestinian nurses regarding cancer pediatric pain management in Nablus hospitals?
- 2- What is the Palestinian nurses' attitude and practice regarding cancer pediatric pain management in Nablus hospitals?
- 3- What are the most common factors that are related to Palestinian nurses' level of knowledge, attitude and practice toward cancer pediatric pain management in Nablus hospitals?
- 4- What are most common barriers of efficient cancer pain management for pediatric patients among Palestinian nurses in Nablus hospitals?

### 1.6 Study Hypotheses

H<sub>0</sub>: There is no significant correlation between nurses' demographic factors and their level of knowledge regarding cancer pain management in pediatric patients in Nablus – Palestine at a significance level of 0.05.

H<sub>0</sub>: There is no significant correlation between nurses' demographic factors and their attitude toward cancer pain management in pediatric patients in Nablus – Palestine at a significance level of 0.05.

H<sub>0</sub>: There is no significant correlation between nurses' demographic factors and their cancer practice toward pain management in pediatric patients in Nablus – Palestine at a significance level of 0.05.

H<sub>0</sub>: There is no significant correlation between Palestinian nurses' level of knowledge and their attitude toward cancer pediatric pain management in Nablus hospitals as a significance level of 0.05.

H<sub>0</sub>: There is no significant correlation between Palestinian nurses' level of knowledge and their practice toward cancer pediatric pain management in Nablus hospitals as a significance level of 0.05.

# 1.7 Conceptual and Operational Definition of Terms

Pain: It can be defined as "distressing experience associated with actual or potential tissue damage with sensory, emotional, cognitive and social components" (Williams and Craig, 2016). Gordon (2015) stated that there are about 20 pain assessment tools for children who don't have cognitive disorders and 4 tools for pain assessment in children with cognitive disorders. The most common pain assessment mnemonic tool is PQRST, which stands for Provokes/Precipitating factor, Quality of pain, Region and Radiation, Severity or associated Symptoms, and Temporal factors/Timing.

**Knowledge, attitude and practice (KAP):** The World Health Organization (WHO) defined the KAP model as a rational model in health education that is based on the notion in which personal increase in knowledge level will influence his/her behavioral change (Siltrakool, 2017).

**Pediatric age**: According to psychological development, there are variety of pediatric age definitions, and the American Academy of Pediatric identifies it as the age between birth and age 21 years old, which is later included adolescence age that is between 11 and 21 years old (Hardin and Hackell, 2017).