



Assessment of Children's Pain in Oncology Unit

Dr. Eqbal Gh, Ali.

Dr. Raja Hadi Abbas.

Dr. Sajid Majeed Hameed.

Abstract

Most children with cancer will be at risk for significant pain at some time during the course of their illness. Pain may be a product of the disease itself or the result of medical intervention in the form of diagnostic procedures, surgery, and chemotherapy, or radiation therapy. An adequate standard of care requires that the clinician systematically assess and effectively manage pain on a routine basis for all children with cancer.

Aim of the study was to :- a) Assess pain with invasive monitoring procedures (pre & post procedure): - vein puncture, lumbar puncture & bone marrow aspiration & biopsy. - b) Assess Current symptoms pre receiving of chemotherapy, - c) Assess Intensity pain with like methods of chemotherapy, d) Assess Family & child's pain experience within the period of treatment

A total of 50 patients age between (6 – 12 years) in oncology unit in central child teaching hospital & children teaching hospital in medical city, from 25th of January to 25th of April 2009. Using questionnaires which has 3 parts, part one – demographic characteristics Part two – assessment pain with monitoring procedures, current symptoms pre receiving of chemotherapy, intensity of pain with methods receiving of chemotherapy. Part three – family & Childs experience pain with use facial expression with poker chips color

Results were analyzed by descriptive statistical including (frequency, percentage, mean of score). Results showed that (50%) of patients were age 6-8 years & diagnosed leukemia, 60% males & number of chemotherapy less than 6th courses, (72%) duration of diseases less than 6th months, 56% number admissions to hospital with out chemotherapy were 3-7 time. Vein Puncture (60%) of sample feeling no pain pre procedure, (80%) feeling some pain bother post procedure Lumbar Puncture (50%) of sample feeling pain that does not bother pre procedure, (80%) feeling sever pain post procedure Bone Marrow Aspiration (60%) of sample feeling some pain bother pre procedure, (100%) feeling unbearable pain post procedure. (40%) fear Pre receiving chemotherapy. (60%) methods receiving of chemotherapy both intravenously & intrathecaly, intravenously methods pain is most hurt while intrathecaly methods pain is the most hurt could ever have. Family experience toward assess pain tool, them showed these easily. Child experience with pain (60%) use word discomfort or no communication when feel pain

In conclusions the study revealed the pain more than in post monitoring procedure specific in lumbar puncture & high level in bone marrow aspiration, fear is the most symptoms syndrome for patients pre receiving of chemotherapy, intravenously methods most methods pain for patient. Most families the tool pain

showed easily & easily transport & more children use words to expression pain & no communication.

Keywords:- Pain, Pain with Cancer, Assess child pain, Pain Under Treatment Chemotherapy

Introduction

Accurate assessment is essential for appropriate & successful management of pain in children with cancer^(1, 8). They have been noticed that few studies on children with cancer have addressed pain assessment, include four studies that focused exclusively on assessment of cancer pain & three studies addressed pain associated with invasive procedure like: - lumber puncture, vein puncture, bone marrow aspiration & biopsy, one study only attended to pain associated with the diseases^(2,5,8). Some other studies focused on estimating prevalence have included assessment of the intensity & source pain. Using of comprehensive approach to pain assessment will help attain the goals for caring for children with pain, these goals are to enhance the child's comfort, promote recovery when possibly & improve functional status, & prevent detrimental effects from unrelieved pain^(3,4, 5). There for the important of implementing this approach is to help the providers understanding of the following factors that influence the pain experience like: - the diseases, its progression & its treatment, the child's & his family, & concurrent symptomatology^(5,6, 9). Typically assessments of pain involve unstructured observation^(5, 7). These observations are causal rather than systematic & the reliability, validity of such observations is unknown^(8,9). The temperament, level & type of activity, & interactions for verbal children, irritability & agitations for preverbal children & pain (undefined) muscle spasms, immobility for terminally ill

children who had communication skills all are an example^(7,8,9)

Materials & Methods

Design of the Study: - Descriptive designs have been carried out to achieve the aims of the study which starting from 25th of January to 25th of April 2009

Setting of the study: - central child teaching hospital (blood diseases unit), children teaching hospital (oncology unit) medical city , in patient of blood diseases unit both of hospitals.

Samples of the study: - (50) Childs, were chosen those children admitted to the receive chemotherapy & requested an invasive procedures

Criteria for sample: - all patients are diagnosed, age between (6-12) years, school age

Method of data collection: - the tool of the study included questionnaires which has 3 parts, part one – demographic characteristics, Part two – assessment pain with monitoring procedures, current symptoms pre receiving of chemotherapy intensity of pain with methods of chemotherapy. Part three – family & Childs experience pain & use facial expression with poker chips color

Data analyzed: - using descriptive statistical including (frequency, percentage, mean of score)

Results

In table (1) we can see entire sample were male (60%), (50%) age between (8-10 years), diagnosed as having leukemia respectively (72%),

duration of diseases less than 6 months, (60%) have courses of chemotherapy less than 6 courses, (48%) from sample were admitted to hospital without chemotherapy around (3-6 time).

In table (2) (60%) of sample do not have pain pre procedure, but (80%) have some pain bother concerning vein puncture, (50%) from both sample have that does not bother pre procedure, but (80%) have sever pain post procedure concerning lumber puncture, but (100%) have unbearable pain concerning bone marrow aspiration & biopsy.

In table (3) (60%) from sample that the most hurt could ever have to interthecal methods for chemotherapy, (60%) both sample were is the more hurt to intravenous method.

Table (4) family's experience to their child's pain, in this table average (cut-off point=1.5) of all items are measured on 2 level of like rating scale (Yes=2, No=1) this items which are more than cut-off point were in (1,2,9, 11,12,13).

Table (5) assessment of child's experience pain show high percent of sample in item (1-B) were (60%), & item (4-A) were (60%). In figure (1) we can see (40%) from sample were anxiety Pre receiving chemotherapy.

Discussion

Of the 50 Iraqi patients with pain complications, all patients are diagnosed by physician, the finding showed that the majority of sample (50%) there age between (6 – 8) years, Regarding the gender the finding showed the majority of the sample (60%) males, Clinically most common patients were diagnosed leukemia & duration of diseases less than 6 months & number courses less than 6months between 30 courses & number admitted to hospital with out

chemotherapy between 3-7 times were 28 admissions^(1,2,9, table 1). Regarding the assessment of the level of pain with monitoring procedures pre & post, vein puncture (60%) of patients feeling no pain pre procedure, (80%) feeling some pain bother post procedure, pain may be a product of the disease itself or the result of medical intervention in the form of diagnostic procedures, Lumber Puncture (50%) of sample feeling pain that does not bother pre procedure, (80%) feeling sever pain post procedure; pain in childhood cancer has a number of possible etiologies, Bone Marrow Aspiration (60%) of sample feeling some pain bother pre procedure, (100%) feeling unbearable pain post procedure, pain ranges in severity from significant pain associated with bone marrow aspirations & lumber punctures to the milder pain associated with vein puncture, venous cannulation, and reservoir access, among the children unlike adults, the majority of cancer pain caused by procedures and treatments with far less stemming from the diseases itself^(4,5,6,7). Regarding pain with current symptoms pre receiving chemotherapy majority of sample (40%) were anxiety pre receiving of chemotherapy, anxiety associated with procedures & treatment are sometimes worse than the pain^(5,9). assessment of pain intensity with methods chemotherapy of administration majority of sample in Intrathecally methods reveled that high percent of sample (60%) pain is the most hurt could ever have & Intravenously methods reveled that high percent of sample (60%) is the more hurt, the majority of cancer pain is caused by procedure & treatments with far less stemming from itself^(3,9). Discussion of family's experience to their child's pain related items 1, 9, the results indicated that (52%) answered (Yes) & remaining (48%) answered

(No) Item 11 the result indicated that (68%) answered (Yes) & remaining (32%) answered (No), Items 12, 13 the results indicated that (100%) answered (Yes) & remaining (0%) answered (No)^(7,8,9). Discussion of child's experience pain item 1-B (60%) of sample answered pain is discomfort related what pain is? Pain is feeling discomfort sensation, Item 4-A (60%) of sample no communication related what do you want others to do for you when hurt?^(4,5,6)

Conclusions & Recommendations

Most patient were males diagnosed as leukemia & short time duration of diseases & admitted to hospital & more than courses of chemotherapy, estimated pain have unbearable pain aspiration & concerning bone marrow biopsy, patients most hurt could ever have to interthecal methods for chemotherapy & were is the more hurt to intravenous method, family & Childs experience pain are acceptable. As recommended, health education program for ill patients in oncology unit, Produce good environment in pediatrics units that include (Using toy & Playing room to develop children skills through, drawing, & kits that help to reduce the fears of the procedures), Booklet should be

prepared to family including methods of communication with the child's pain period.

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Table 1:- demographic characteristics of the study group according to age, gender, clinical diagnosis, duration of disease, & No, courses of chemotherapy, also No, admitted to hospital without chemotherapy

%	F	Study group categories	Study group
50	25	6 – 8 y	Age group
30	15	8 – 10 y	
20	10	10 – 12 y	
60	30	Male	Gender
40	20	Female	
50	25	Leukemia	Clinical diagnosis
30	15	Lymphoma	
20	10	Myeloma	
72	36	Less than 6 months	Duration of disease
28	14	More than 6 months	
60	30	Less than 6 courses	No, course of chemotherapy
40	20	More than 6 courses	
56	28	3 – 7	No, admitted to hospital without chemotherapy
44	22	8 – 12	

F: frequency, %: percentage , No: Number

Table 2 :- assessment of the level of pain with monitoring procedures

Procedures Level of pain	Vein puncture				Lumber puncture				Bone marrow aspiration			
	Pre		Post		Pre		post		Pre		Post	
	F	%	F	%	F	%	F	%	F	%	F	%
No pain	30	60	0	0	20	40	0	0	0	0	0	0
Pain that does not bother	10	20	10	20	25	50	0	0	20	40	0	0
Some pain	10	20	40	80	5	10	0	0	30	60	0	0
Sever pain	0	0	0	0	0	0	40	80	0	0	0	0
Unbearable pain	0	0	0	0	0	0	10	20	0	0	50	100
Total	50	100	50	100	50	100	50	100	50	100	50	100

Table 3 :- assessment of pain intensity with chemotherapy & its methods of administration

Pain intensity	Methods	Intrathecally		Intravenously	
		F	%	F	%
Is the most hurt could ever have		30	60	10	20
Is the most hurt		10	20	30	60
Is little more hurt		10	20	5	10
To just little hurt		0	0	5	10
Total		50	100	50	100

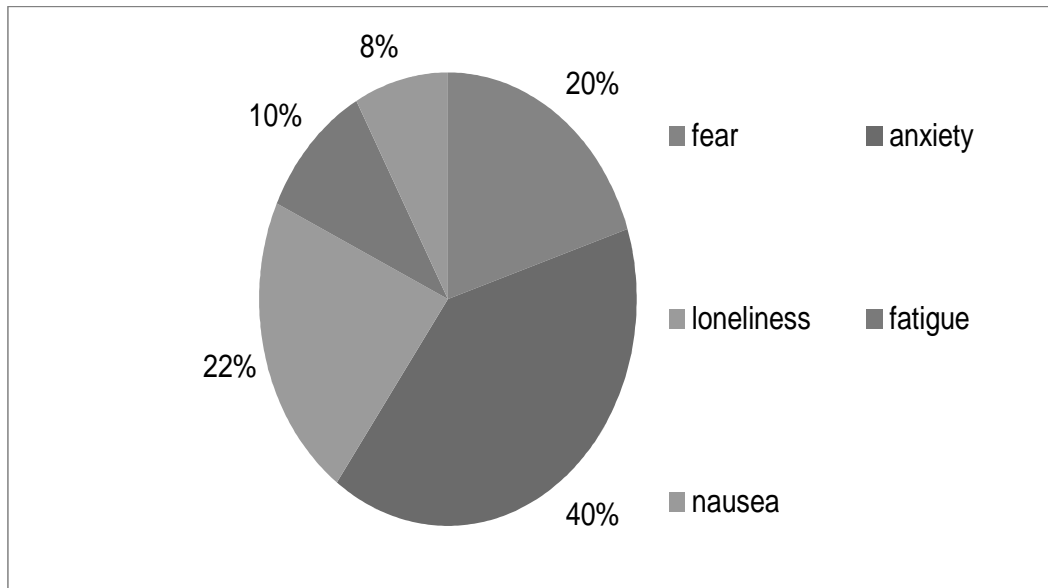


Figure 1: Assessment of pain with current symptoms pre receiving chemotherapy