A Clinical Survey on Satisfaction of Pain Management in Patients with Cancer in Taiwan

Johnson Lin, Ruey-Kuen Hsieh, Jen-Shi Chen, Kuan-Der Lee, Kun-Ming Rau, Yu-Yun Shao, Yung-Chuan Sung, Yu-Min Liao, Cheng-Shyong Chang, Ta-Chih Liu, Ming-Fang Wu, Ming-Yang Lee, Ming-Sun Yu, Chia-Jui Yen, Pang-Yu Lai, Wen-Li Hwang, Tzeon-Jye Chiou

Taiwan Society of Cancer Palliative Medicine

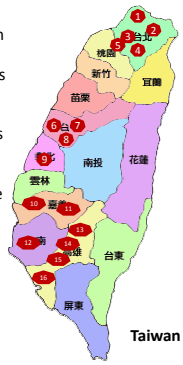
Introduction

- Pain is a major problem for cancer patients, and poor pain control could impact on patients' quality of life(QoL). Satisfaction with physicians and treatments is important since it may influence decisions to medical plans.
- The objectives of this survey were to investigate the prevalence of pain and satisfaction with treatments and physicians in cancer patients of Taiwan.
- All the information collected from hospitals were used to evaluate satisfaction of the pain management and improved cancer patients' quality of life.

Methods

Study Assessments and Procedures : The cancer patients including inpatients and outpatients who met the selection criteria were included in this survey. Patients were asked to complete the questionnaire and relevant data about patient characteristics (i.e., gender, age, disease status and previous/current treatment) were obtained from each patient's medical records. The outcome questionnaire of this study is based on the Brief Pain Inventory (BPI). All participants also were asked about the levels of satisfaction with doctors who treated their pain and pain treatment separately.

Data Analysis and Statistical Considerations : 3,298 cancer patients were enrolled in this multi-center survey. The results were summarized using descriptive statistics. All 4 pain intensity items and 7 interference items were summarized. The 7 interference items were also grouped into 2 subscales; pain interference with physical functions (general activity, walking ability, and normal work) and psychological functions (mood, relations with other, enjoyment of life, and sleep). Regression analyses were performed to evaluate the relationship between the pain severity and pain interference scores.



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Results

Study Population(Table 1) and patients demographics(Table 2)

- The analysis was based on five population categories: pain, no-pain, out-patient department (OPD), in-patient (hospitalization) department (IPD), and overall (all groups combined).
- The pain population was defined as patients who had experienced pain during the previous week and the remaining patients who did not experience pain during the previous week comprised the no-pain (pain-free) population.

Table 1 Study population	Population				
	Overall	Pain	No-Pain	OPD	IPD
Number of patients included	3,289	1,565 (47.6%)	1,724 (52.4%)	2,652	637
				1,167 with pain (44.0%)	398 with pain (62.5%)

Table 2 Patient demographics		Population				
		Overall	Pain	No-Pain	OPD	IPD
Sex	Female	1398 (42.5%)	632 (40.4%)	766 (44.4%)	1169 (44.1%)	229 (35.9%)
	Male	1891 (57.5%)	933 (59.6%)	958 (55.6%)	1483 (55.9%)	408 (64.1%)
Age (years)	Mean±SD	57.1±12.4	56.4±12.0	57.7±12.7	57.6±12.3	55.1±12.6
	Median	57.0	57.0	58.0	58.0	56.0
Ever treated for pain in lifetime		2470 (75.1%)	1478 (94.4%)	992 (57.5%)	1948 (73.5%)	522 (81.9%)
Cancer category	Gastrointestinal	804 (24.4%)	349 (22.3%)	455 (26.4%)	630 (23.8%)	174 (27.3%)
	Breast	534 (16.2%)	210 (13.4%)	324 (18.8%)	499 (18.8%)	35 (05.5%)
	Head and Neck	708 (21.5%)	429 (27.4%)	279 (16.2%)	549 (20.7%)	159 (25.0%)
	Lymphomas	353 (10.7%)	123 (07.9%)	230 (13.3%)	277 (10.4%)	76 (11.9%)
	Respiratory and Mediastinal	255 (07.8%)	142 (09.1%)	113 (06.6%)	205 (07.7%)	50 (07.8%)
	Hepatobiliary	208 (06.3%)	114 (07.3%)	94 (05.5%)	181 (06.8%)	27 (04.2%)
	Leukaemias	154 (04.7%)	50 (03.2%)	104 (06.0%)	114 (04.3%)	40 (06.3%)
	Others	273 (08.3%)	148 (09.5%)	125 (07.3%)	197 (07.4%)	76 (11.9%)
Disease status	No Evidence	682 (20.7%)	159 (10.2%)	523 (30.3%)	659 (24.8%)	23 (03.6%)
	Partial Response	543 (16.5%)	296 (18.9%)	247 (14.3%)	433 (16.3%)	110 (17.3%)
	Stable/Static	1060 (32.2%)	479 (30.6%)	581 (33.7%)	901 (34.0%)	159 (25.0%)
	Progression	560 (17.0%)	400 (25.6%)	160 (09.3%)	375 (14.1%)	185 (29.0%)
	Not yet Assessment	444 (13.5%)	231 (14.8%)	213 (12.4%)	284 (10.7%)	160 (25.1%)
Cancer-related pain		1367 (41.6%)	1084 (69.3%)	283 (16.4%)	1002 (37.8%)	365 (57.3%)
Non- cancer-related pain		619 (18.8%)	350 (22.4%)	269 (15.6%)	535 (20.2%)	84 (13.2%)
Cancer treatment related pain		401 (12.2%)	252 (16.1%)	149 (08.6%)	229 (08.6%)	172 (27.0%)

Pain severity and Pain Interference scores (Figure 1 & 2)

- The mean pain severity score was 3.48±1.79.
- The overall interference score was 3.63.
- The prevalence of pain interference score ≥4(moderate to severe) was 41.5%.
- Among the evaluation of quality of life, the prevalence of pain interference score ≥4 in sleep was 54.99% and highest in seven subsections(Figure 1).
- The empirical relationship between the pain severity and pain interference score is shown in scatter plots as Loess regression curves, and it indicates that a higher pain severity score is associated with greater interference both in OPD and IPD patients(Figure 2).

Figure 1. Prevalence of pain interference score ≥ 4 in seven subsections

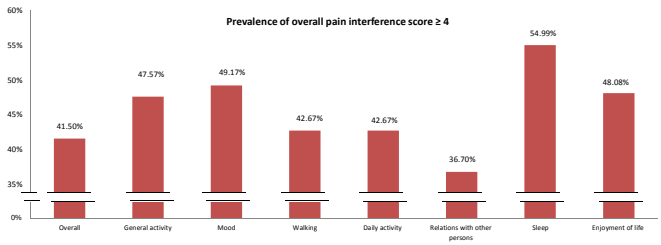


Figure 2. Pain intensity and interference with regression curve

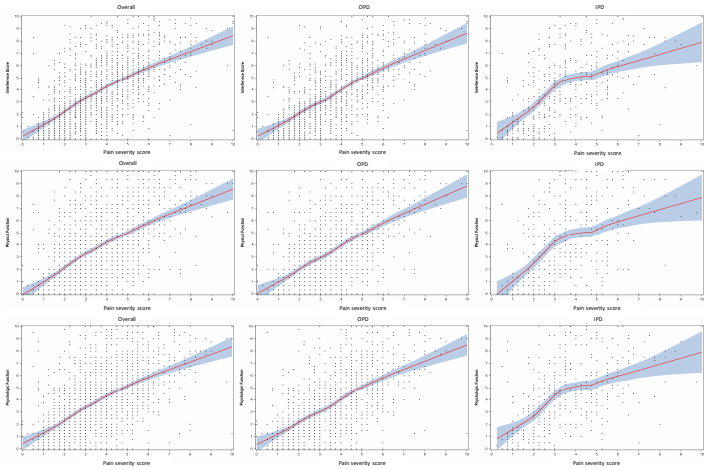
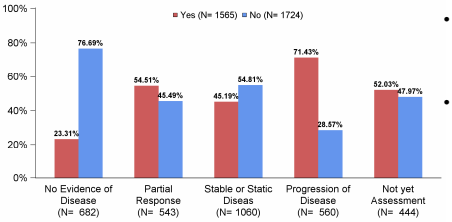
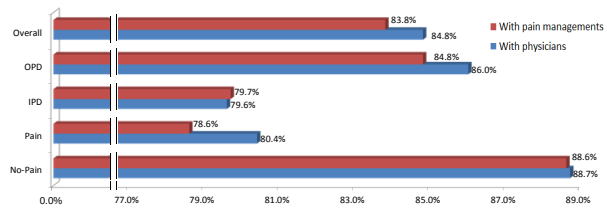


Figure 3. Proportions of patients who had experienced pain during the previous week classified by disease status



- 23.31% patients still suffered from pain during the previous week even they had no evidence of disease(Figure 3).
- More than 80% cancer patients with pain were satisfied with their pain managements and physicians(Figure 4).

Figure 4. Satisfactoriness with pain managements / physicians



Conclusions

- In this survey, the prevalence of cancer pain was 47.6%. Among the patients without evidence of disease, there were still 23.31% patients experienced pain during the previous week.
- The pain interferences in quality of life were addressed and highest in sleep(the prevalence of pain interference score ≥4 was 54.99%).
- The overall satisfaction rates with pain managements and physicians were more than 80%. Both were lower in patients with pain, as well as in IPD patients in comparison to OPD patients.

Disclosures / Acknowledgements

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