Dimensions, correlates and perceptions regarding pain and its management among adult resident patients with cancer

- a Sri Lankan study

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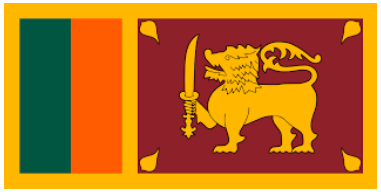

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FLOW

- Background
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- Materials & Methods
- Results
- Inferences

BACKGROUND

- **Pain is the most feared symptom in cancer.**
- **Prevalence of pain among cancer: 50% - 75%** (International Association for the Study of Pain – IASP)
- In **90%**: **pain can be successfully alleviated**.
- Despite the emphasis placed on the assessment and management of pain in international guidelines, the **prevalence of undertreated pain is significantly high (50%) around the globe**;
  - **more** so in **regions with poor Gross National Per-capita Income**.
  - Therefore, more research is needed especially exploring the **magnitude about the problem at regional levels.**
- The discipline of **palliative care** is an emerging field in **Sri Lanka.**
- The **lack of published evidence locally about cancer pain** deems that a study conducted on the **dimensions of 'pain' and its associations as per the patients' view**, could not have come at a better time.

OBJECTIVES

General Objective

To evaluate the **dimensions of pain, its effect on physical and psychosocial wellbeing and perspectives regarding pain management** among resident cancer patients in an oncology institution.

Brief Pain Inventory (BPI): tested extensively **across cultures and linguistic backgrounds** and was approved to be a **reliable and valid** instrument to gauge pain (Kumar SP, 2011; Cleeland CS, 1994))

Brief Pain Inventory (Short Form)

Study ID#_____ Hospital# _____
Do not write above this line.

Date: _____

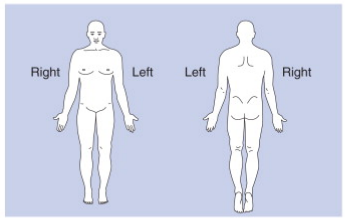
Time: _____

Name: _____
Last First Middle initial

1) Throughout our lives, most of us have had pain from time to time (such as minor headaches, sprains, and toothaches). Have you had pain other than these everyday kinds of pain today?

1. yes 2. no

2) On the diagram, shade in the areas where you feel pain. Put an X on the area that hurts the most.



3) Please rate your pain by circling the one number that best describes your pain at its **WORST** in the past 24 hours.

0 1 2 3 4 5 6 7 8 9 10
No Pain — Pain as bad as you can imagine

4) Please rate your pain by circling the one number that best describes your pain at its **LEAST** in the past 24 hours.

0 1 2 3 4 5 6 7 8 9 10
No Pain — Pain as bad as you can imagine

5) Please rate your pain by circling the one number that best describes your pain on the **AVERAGE.**

0 1 2 3 4 5 6 7 8 9 10
No Pain — Pain as bad as you can imagine

6) Please rate your pain by circling the one number that tells how much pain you have **RIGHT NOW.**

0 1 2 3 4 5 6 7 8 9 10
No Pain — Pain as bad as you can imagine

7) What treatments or medications are you receiveing for your pain?

_____

8) In the past 24 hours, how much **RELIEF** have pain treatments or medications provided? Please circle the one percentage that most shows how much relief you have received.

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
No Relief — Complete Relief

9) Circle the one number that describes how, during the past 24 hours **PAIN HAS INTERFERED** with your:

A. General Activity:

0 1 2 3 4 5 6 7 8 9 10
Does not interfere — Completely interferes

B. Mood

0 1 2 3 4 5 6 7 8 9 10
Does not interfere — Completely interferes

C. Walking Ability

0 1 2 3 4 5 6 7 8 9 10
Does not interfere — Completely interferes

D. Normal work (includes both work outside the home and housework)

0 1 2 3 4 5 6 7 8 9 10
Does not interfere — Completely interferes

E. Relation with other people

0 1 2 3 4 5 6 7 8 9 10
Does not interfere — Completely interferes

F. Sleep

0 1 2 3 4 5 6 7 8 9 10
Does not interfere — Completely interferes

G. Enjoyment of life

0 1 2 3 4 5 6 7 8 9 10
Does not interfere — Completely interferes

Specific Objectives

1) Demographic Details

2) Disease Related Factors
   - Type and site of cancer
   - Metastasis

3) Pain Related Factors
   - Intensity, site and character of pain
   - Relieving factors
   - Aggravating factors
   - Lifestyle influences of pain

4) Analgesics Related Factors
   - Analgesic prescriptions
   - Patients' perception on pain medication

MATERIALS AND METHODS

Type of Study	Descriptive Cross-Sectional
Study population	Total enumerative sampling method 385 adult resident cancer patients Medical and Surgical Units
Mode of Data Collection	Through an interviewer administered questionnaire (June – December 2018)
Analysis	Besides the proportions and percentages, **the correlations between variables** were assessed using Kendall's Tau-b correlation test.

RESULTS

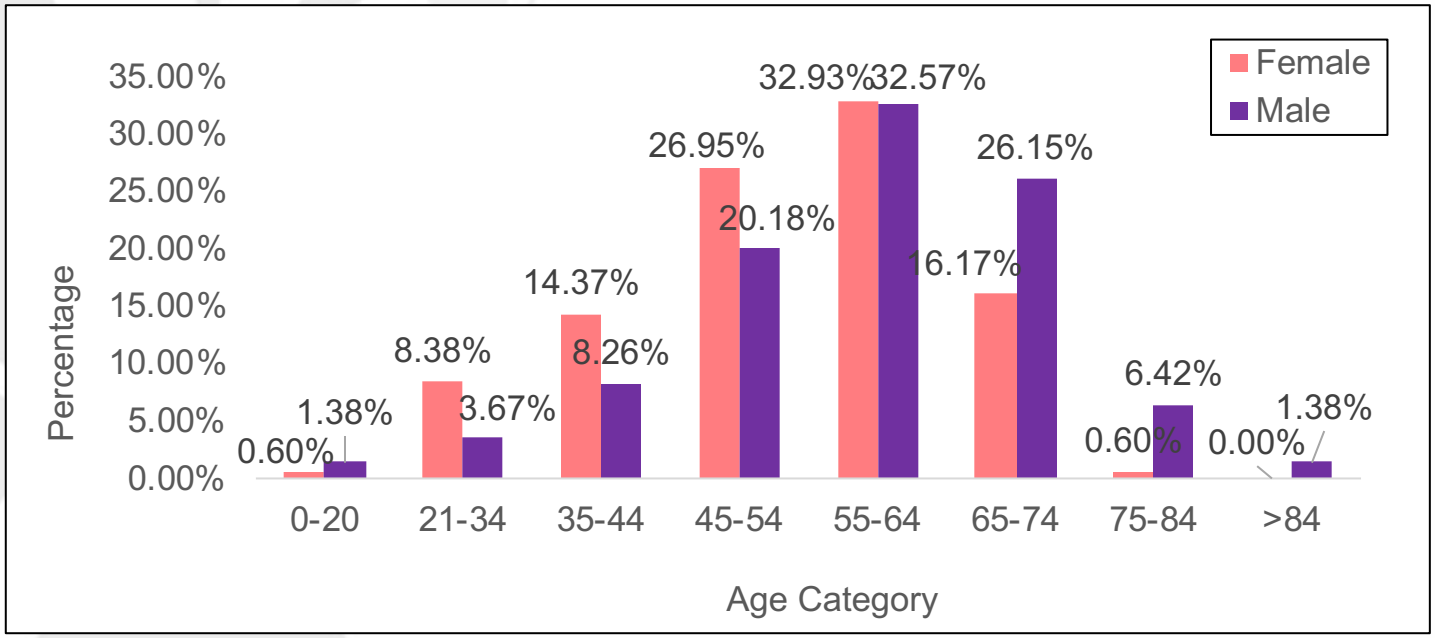
1. Demographical analysis

43.38%

More than 80% are below 64 years.

56.62%

Around 66% are below 64 years.



1. Demographical analysis

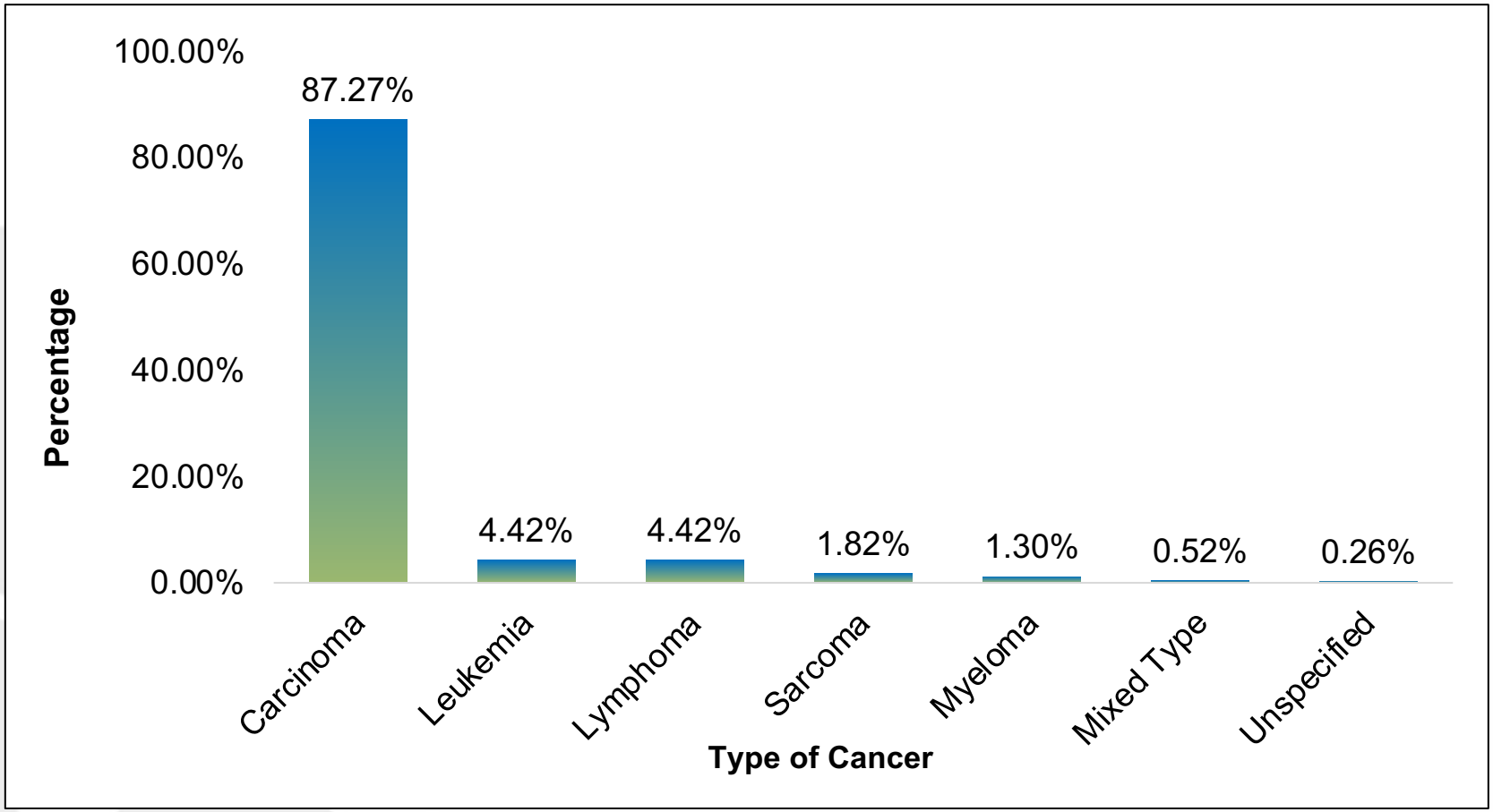
VARIABLE	CATEGORY	NUMBER	PERCENTAGE
Gender	Female	167	43.38%
	Male	218	56.62%
Age	0-20 Years	4	1.04%
	21-34 Years	22	5.71%
	35-44 Years	42	10.91%
	45-54 Years	89	23.12%
	55-64 Years	**126**	**32.73%**
	65-74 Years	84	21.82%
	75-84 Years	15	3.90%
	> 84 Years	3	0.78%
Ethnicity	Sinhala	344	89.35%
	Tamil	24	6.23%
	Muslim	17	4.42%

1. Demographical analysis

VARIABLE	CATEGORY	NUMBER	PERCENTAGE
Religion	Buddhist	302	78.44%
	Christian	30	7.80%
	Catholic	16	4.16%
	Hindu	20	5.18%
	Islam	17	4.42%
Civil Status	Married	297	77.14%
	Single	42	10.91%
	Divorced	12	3.11%
	Separated	1	0.26%
	Widowed	32	8.32%
	Missing	1	0.26%
Current Employment Status	Employed outside the home, Full time	37	9.61%
	Employed outside the home, Part time	65	16.88%
	Retired	29	7.53%
	Homemaker	8	2.08%
	Unemployed (4.4% Sri Lanka overall - 2018)	**245**	**63.64%**
	Missing	1	0.26%

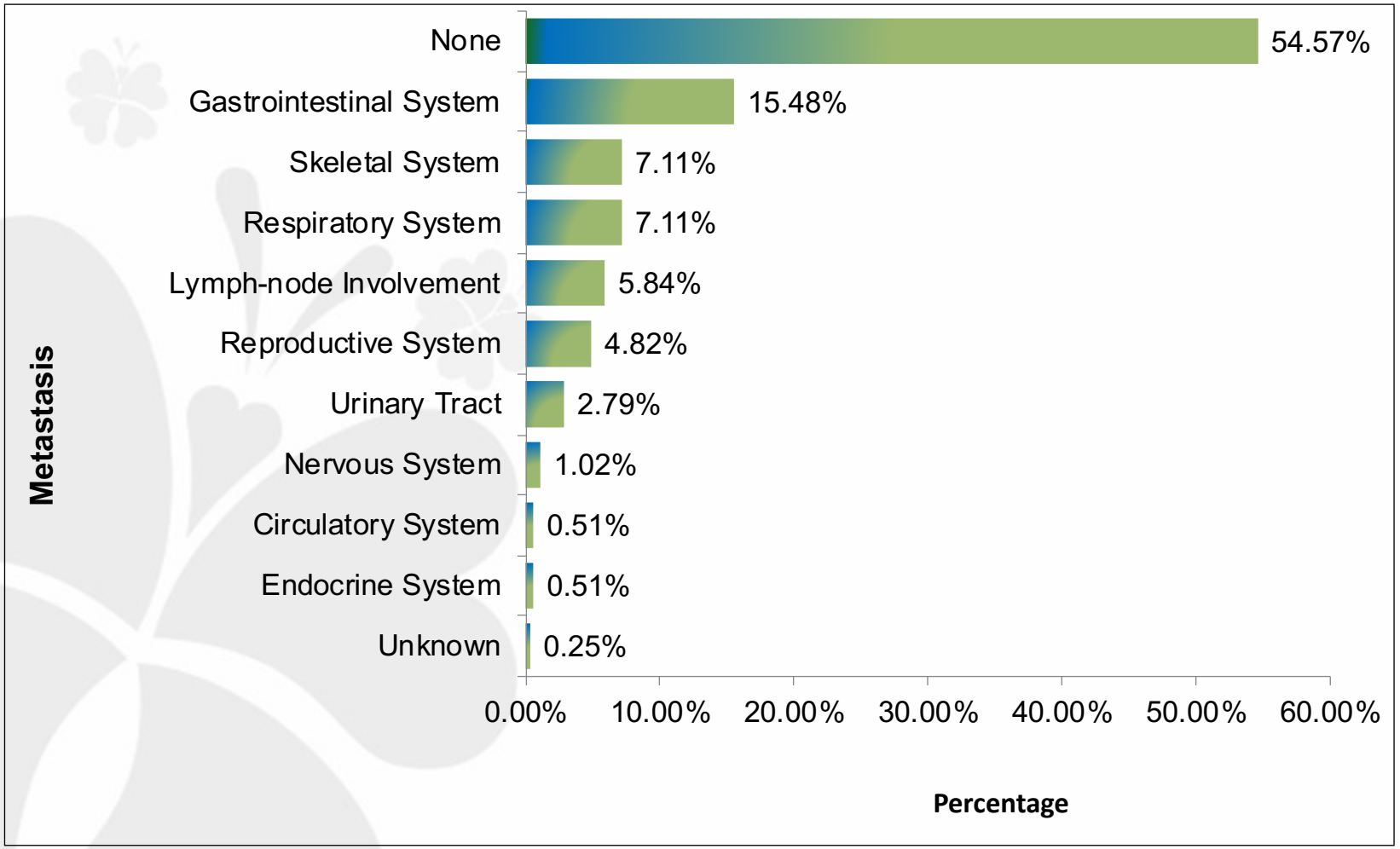
2. Disease Related Results

Type of cancer



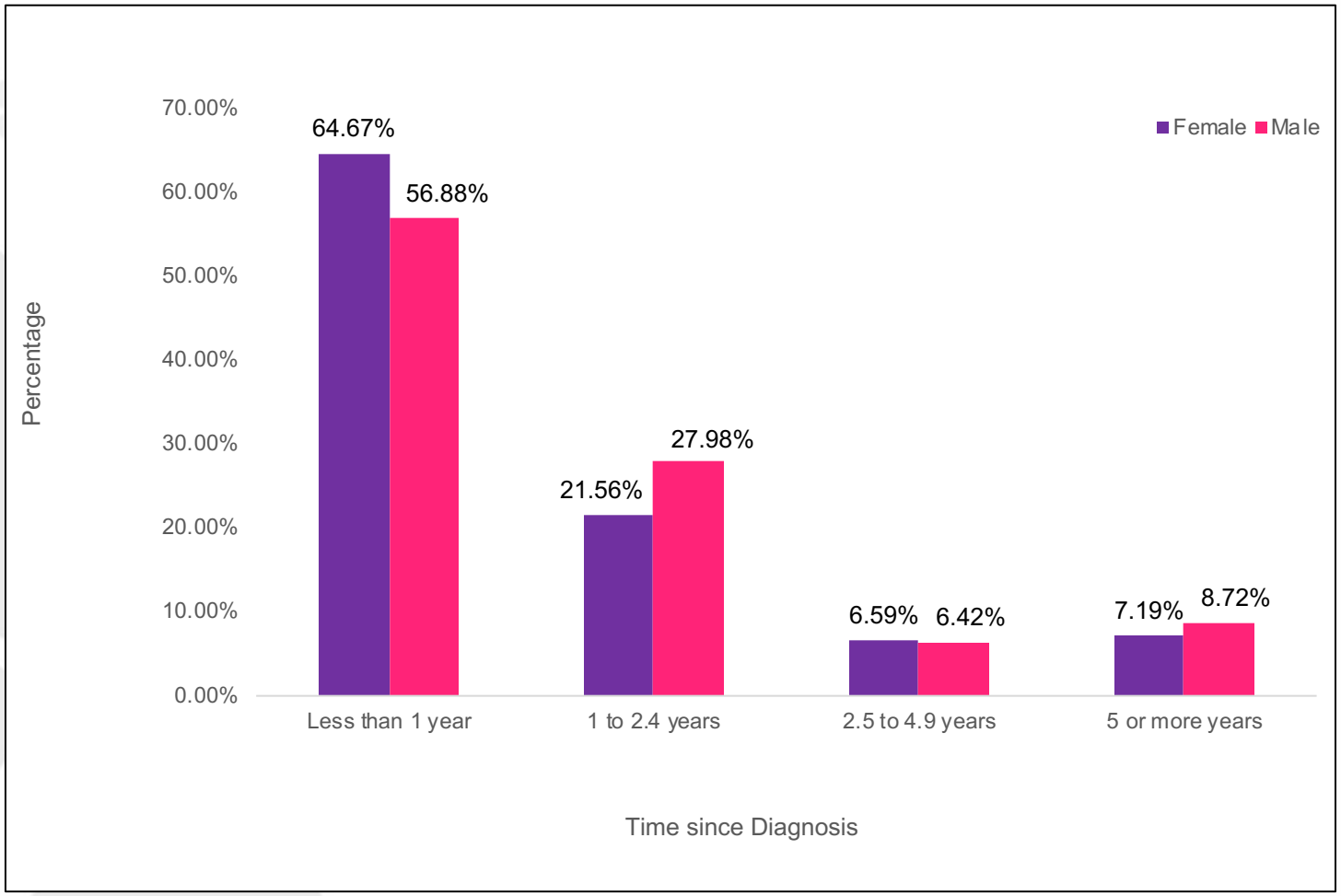
2. Disease Related Results

Metastasis



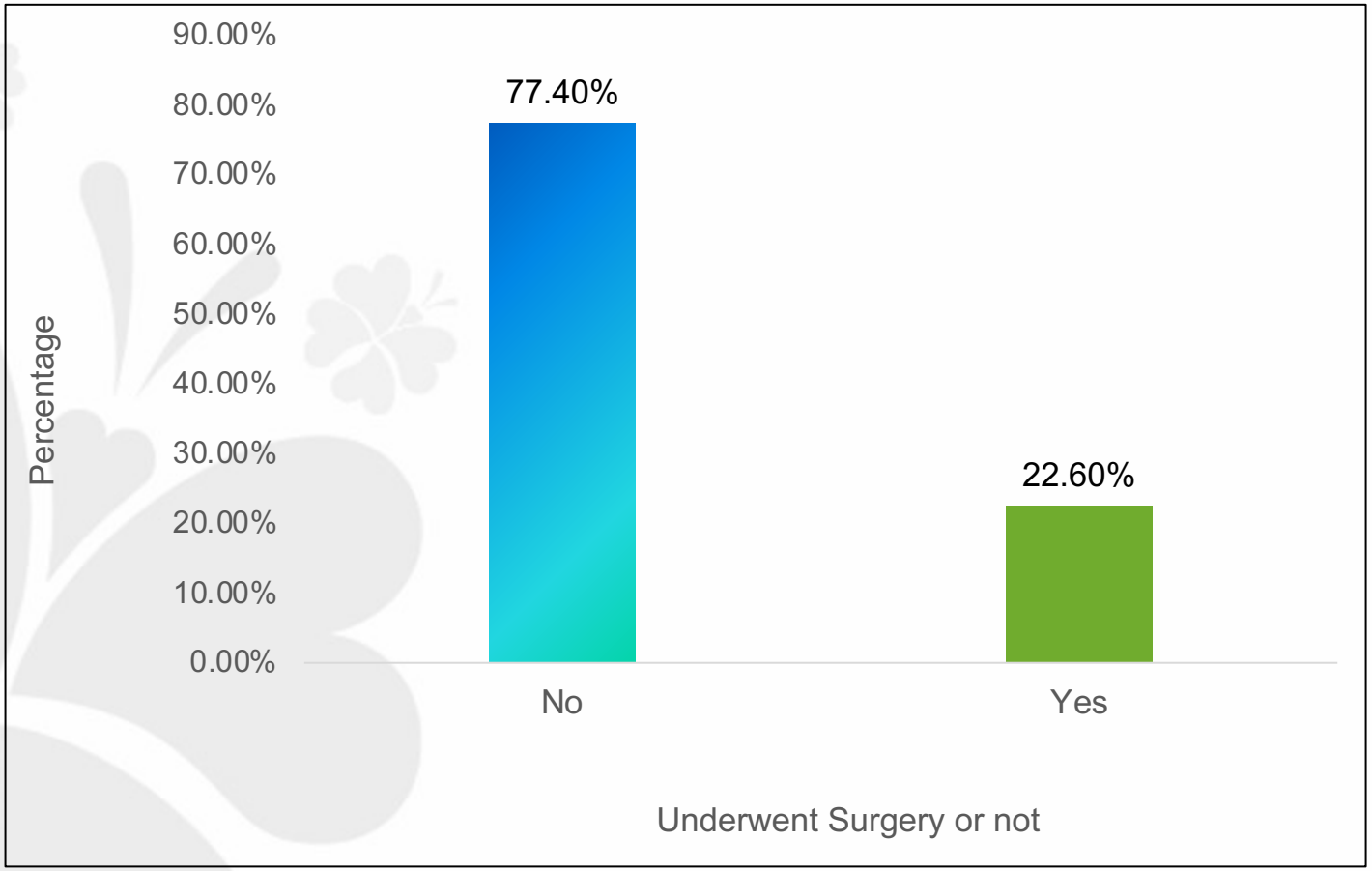
2. Disease Related Results

Time since Diagnosis



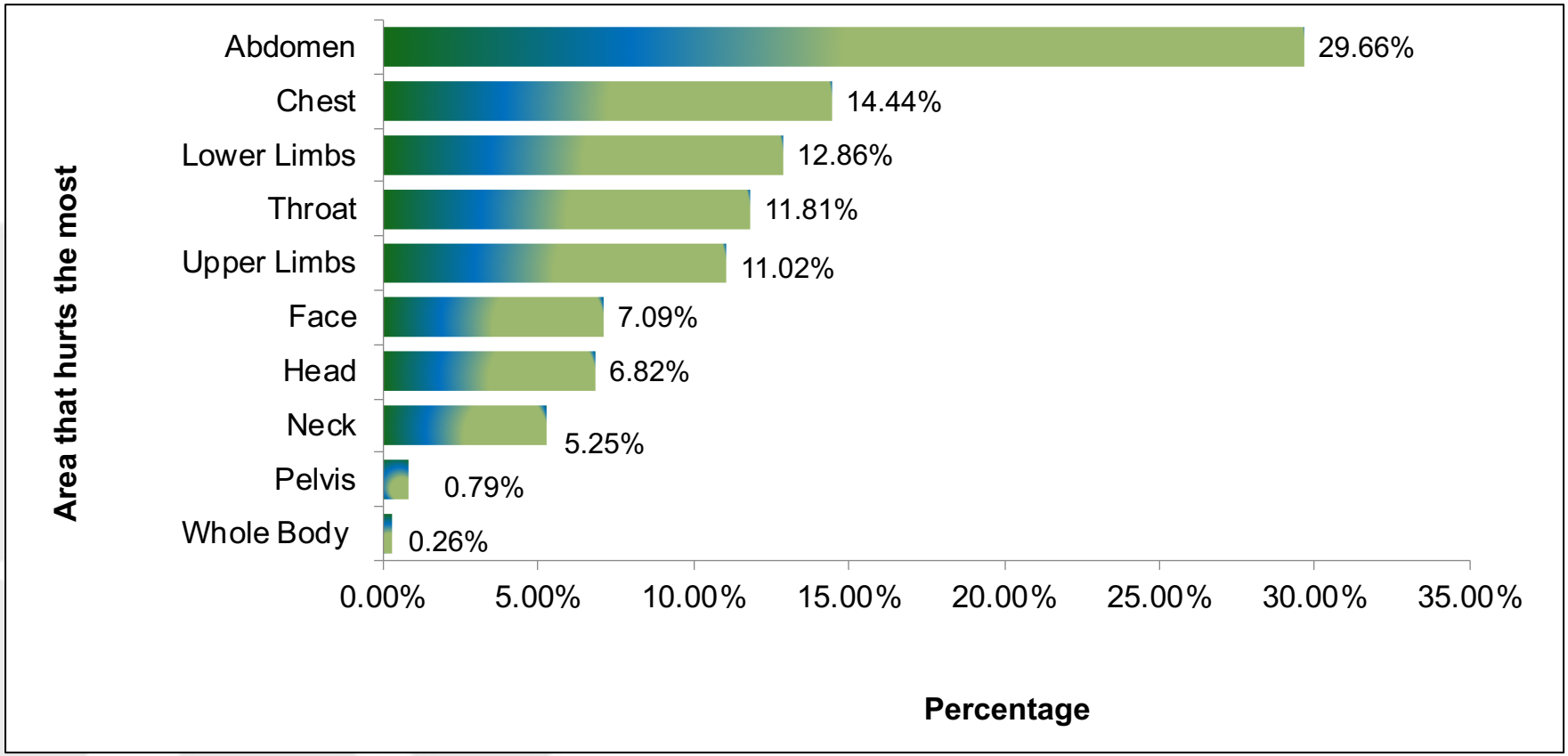
2. Disease Related Results

Surgeries and invasive procedures



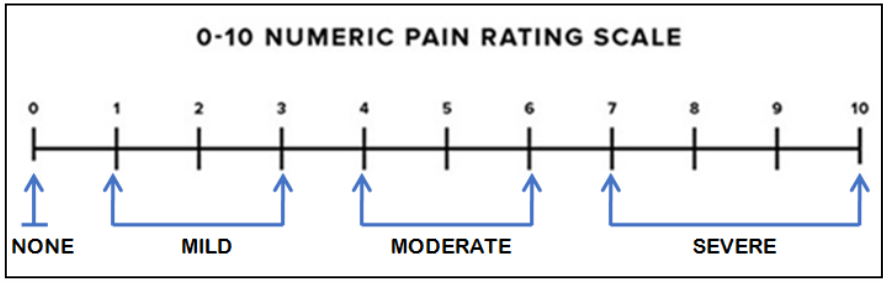
3. Pain Related Results

Site of pain



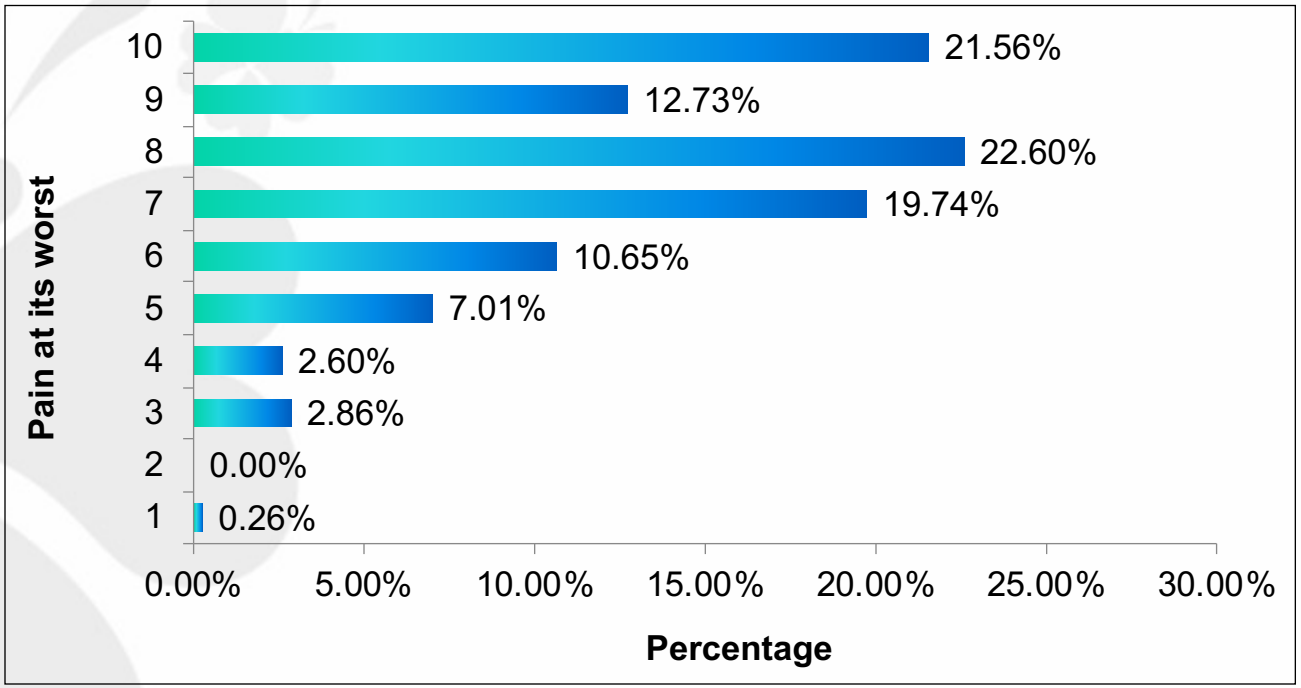
3. Pain Related Results

Intensity of Pain



Worst pain over the past week

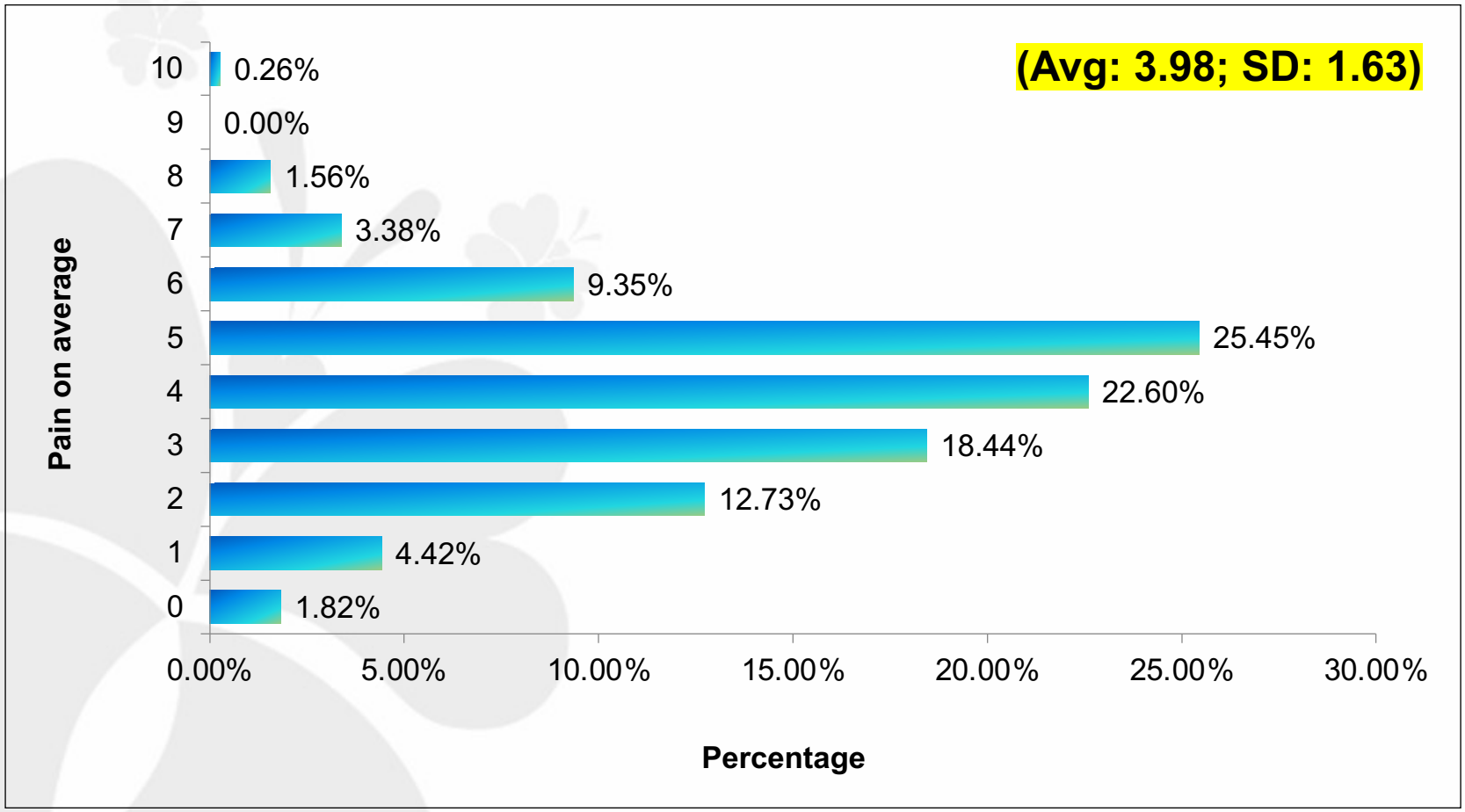
Avg: 7.67
SD: 1.85



3. Pain Related Results

Intensity of pain

Average pain over the past week



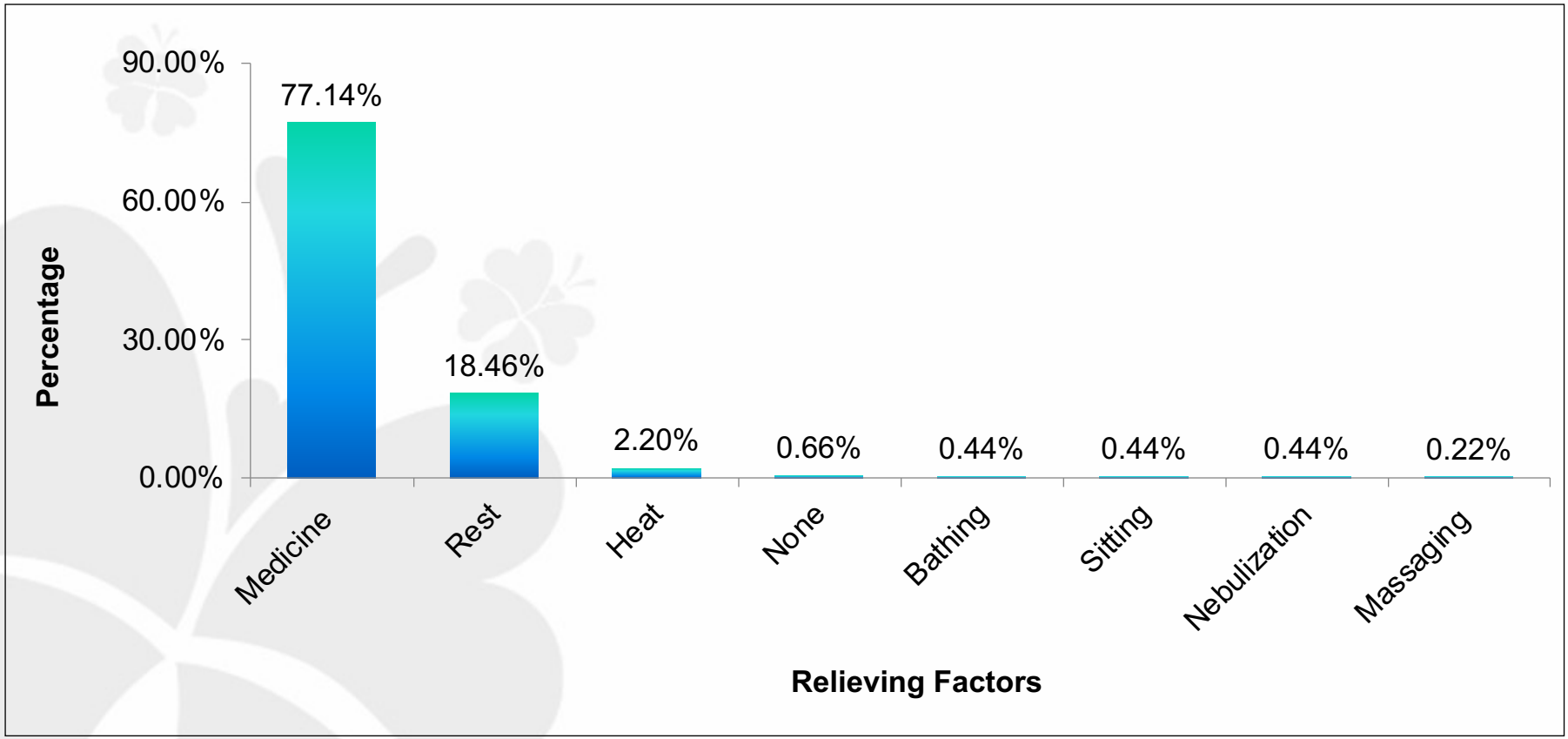
3. Pain Related Results

Character of pain

Character of Pain		Frequency	Percentage
Aching	Yes	**141**	36.6%
	No	244	63.4%
Throbbing	Yes	**124**	32.2%
	No	261	67.8%
Shooting	Yes	**97**	25.2%
	No	288	74.8%
Stabbing	Yes	0	0%
	No	385	100%
Gnawing	Yes	0	0%
	No	385	100%
Sharp	Yes	103	26.8%
	No	282	73.2%
Tender	Yes	66	17.1%
	No	319	82.9%
Burning	Yes	32	8.3%
	No	353	91.7%
Exhausting	Yes	12	3.1%
	No	373	96.9%
Tiring	Yes	20	5.2%
	No	365	94.8%
Penetrating	Yes	6	1.6%
	No	379	98.4%
Nagging	Yes	36	9.4%
	No	349	90.6%
Numb	Yes	27	7%
	No	358	93%
Miserable	Yes	26	6.8%
	No	359	93.2%
Unbearable	Yes	52	13.5%
	No	333	86.5%

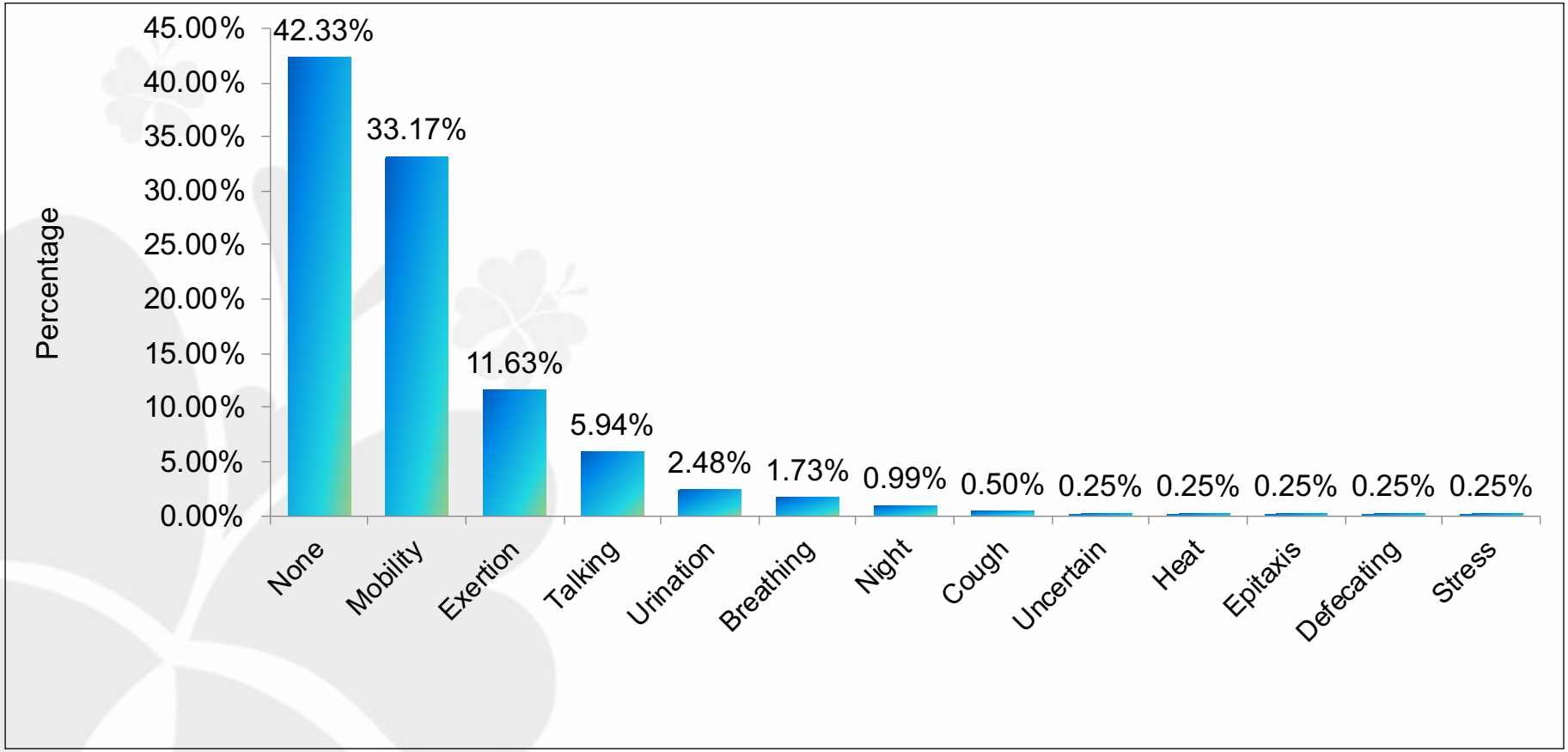
3. Pain Related Results

Relieving Factors



3. Pain Related Results

Aggravating Factors



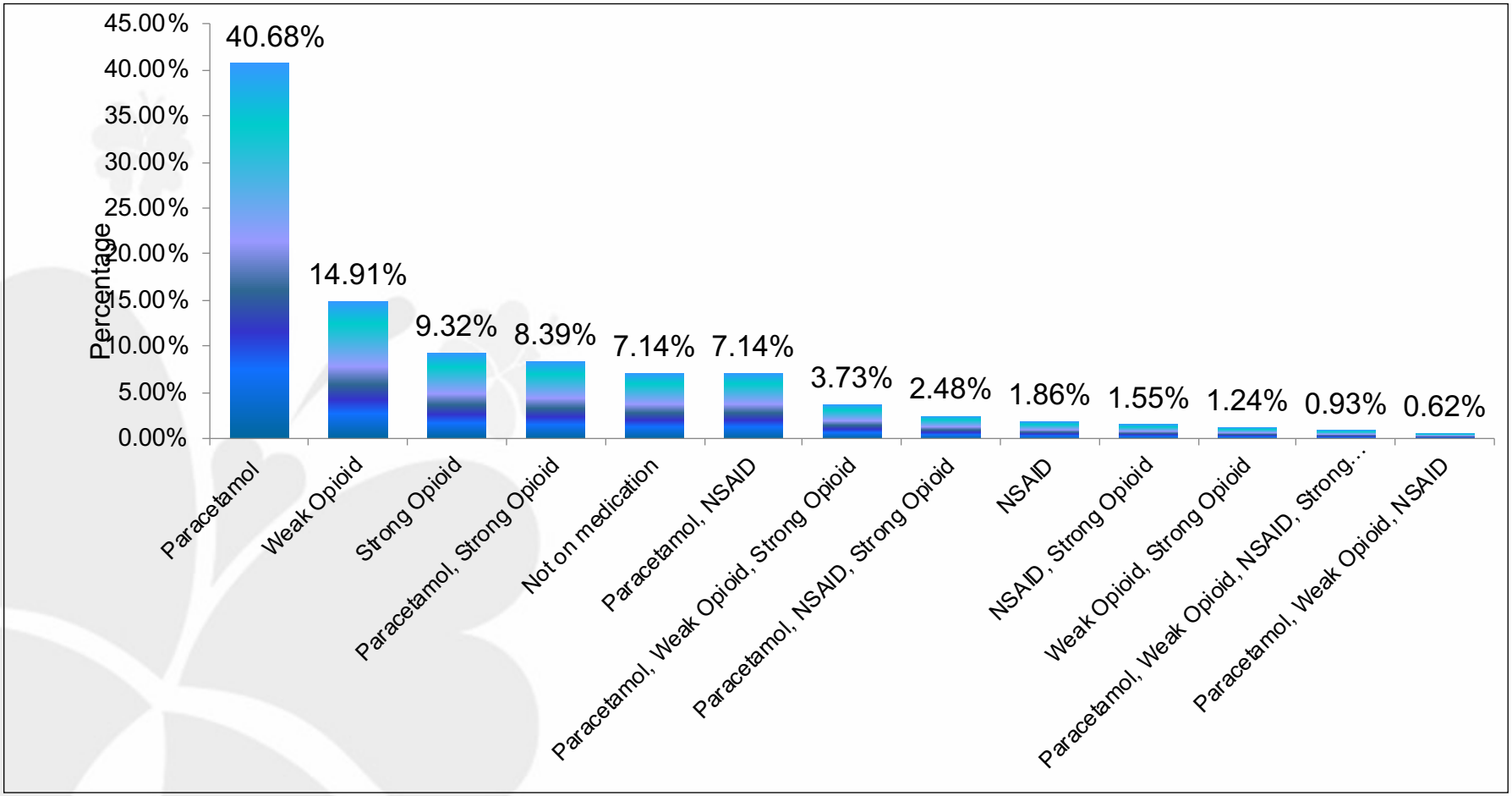
3. Pain Related Results

Interferences with activities and lifestyle

Factors	VAS (Visual Analogue Scale) Score										
	0	1	2	3	4	5	6	7	8	9	10
General Activity	34.29%	2.6%	9.61%	9.87%	7.79%	5.97%	4.94%	3.38%	7.53%	3.38%	10.65%
Mood	35.58%	3.9%	10.91%	9.87%	5.45%	8.05%	5.19%	3.64%	5.71%	6.23%	5.45%
Walking Ability	43.23%	3.91%	6.25%	8.33%	7.55%	4.95%	5.73%	3.39%	5.47%	5.99%	5.21%
Normal Work (house and outside)	22.92%	2.08%	5.73%	7.81%	10.94%	9.11%	7.55%	5.47%	7.29%	9.38%	11.72%
Relations with other people	42.19%	4.95%	7.03%	8.85%	6.77%	6.25%	6.77%	4.69%	3.39%	3.39%	5.73%
Sleep	12.99%	1.56%	4.42%	7.27%	11.69%	13.77%	8.31%`	9.35%	10.39%	8.31%	11.95%
Enjoyment of Life	27.08%	3.69%	7.81%	13.54%	10.16%	7.29%	3.65%	5.99%	6.77%	6.51%	7.55%

4. Pain Treatment Related Results

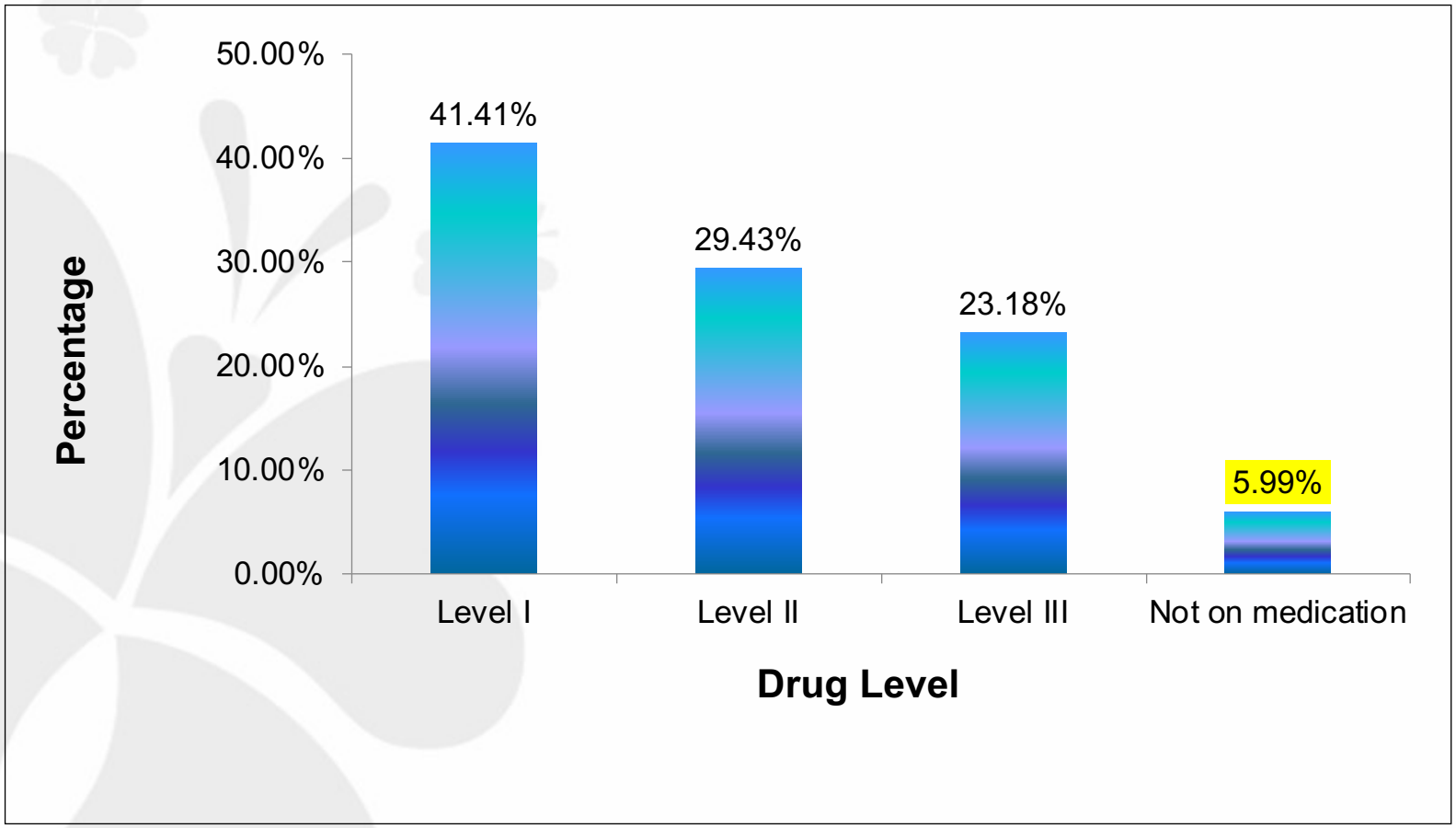
Pain medications (analgesics)



4. Pain Treatment Related Results

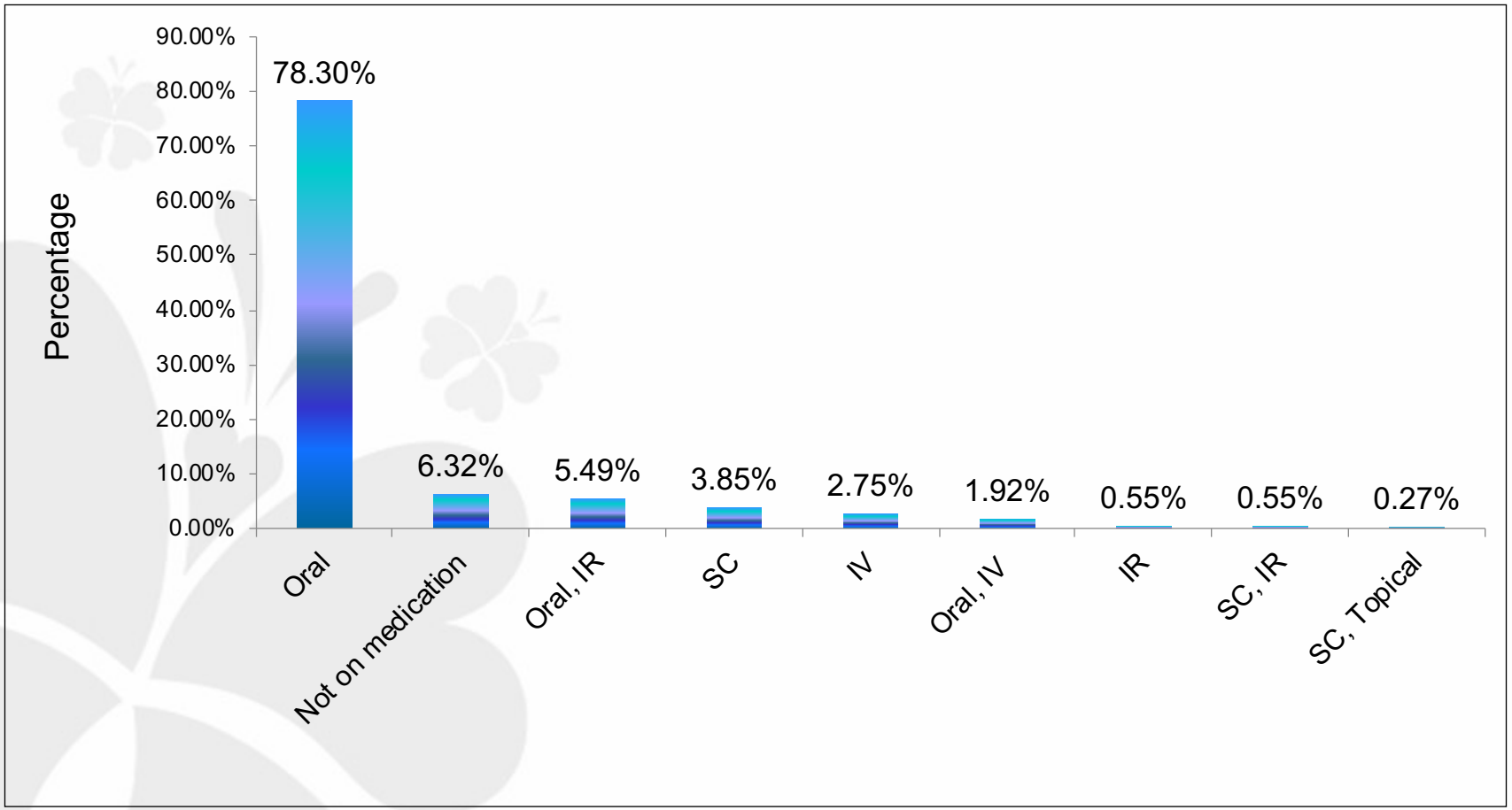
Levels of analgesics used

WHO analgesic step ladder



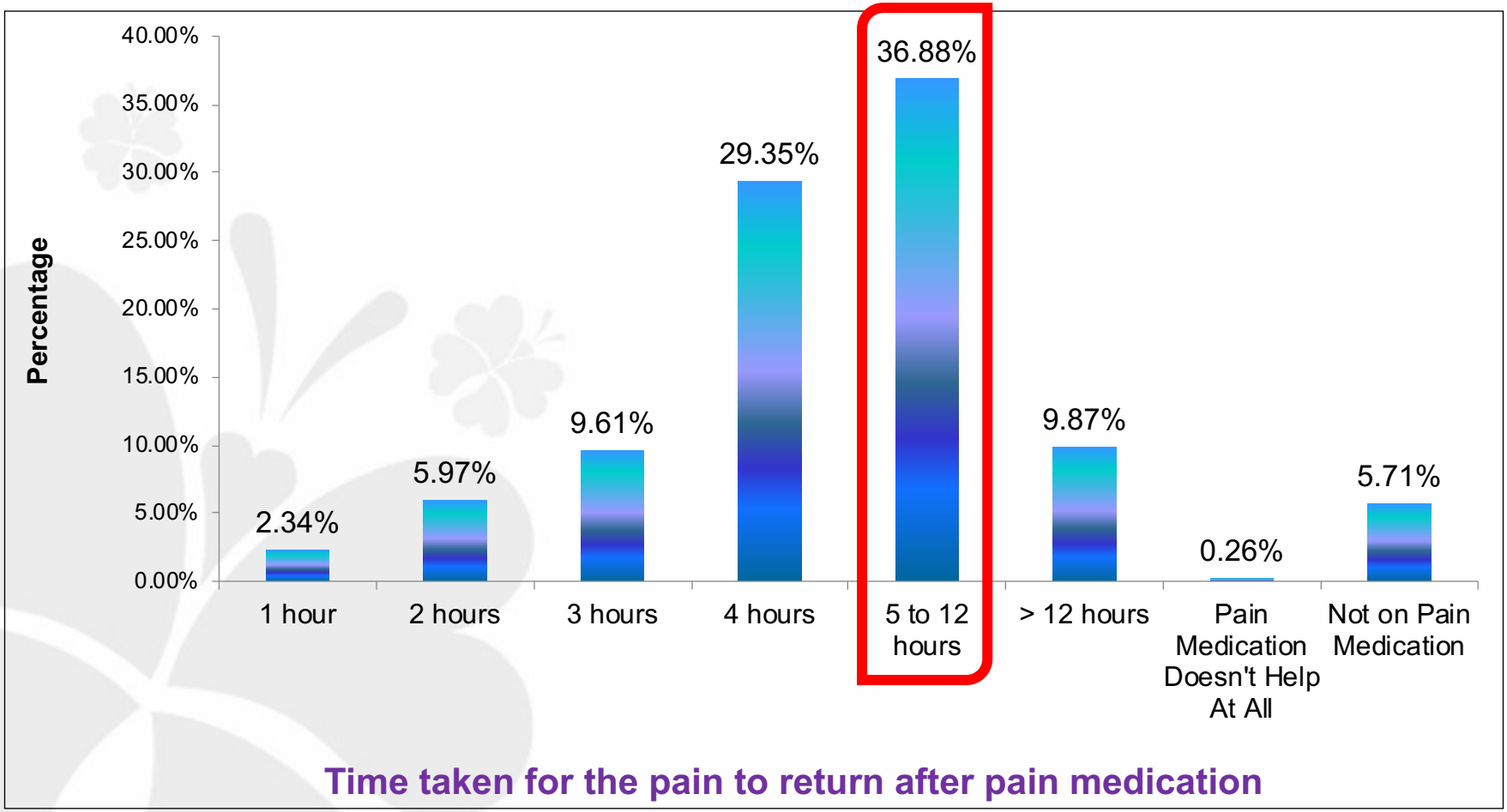
4. Pain Treatment Related Results

Routes of analgesics



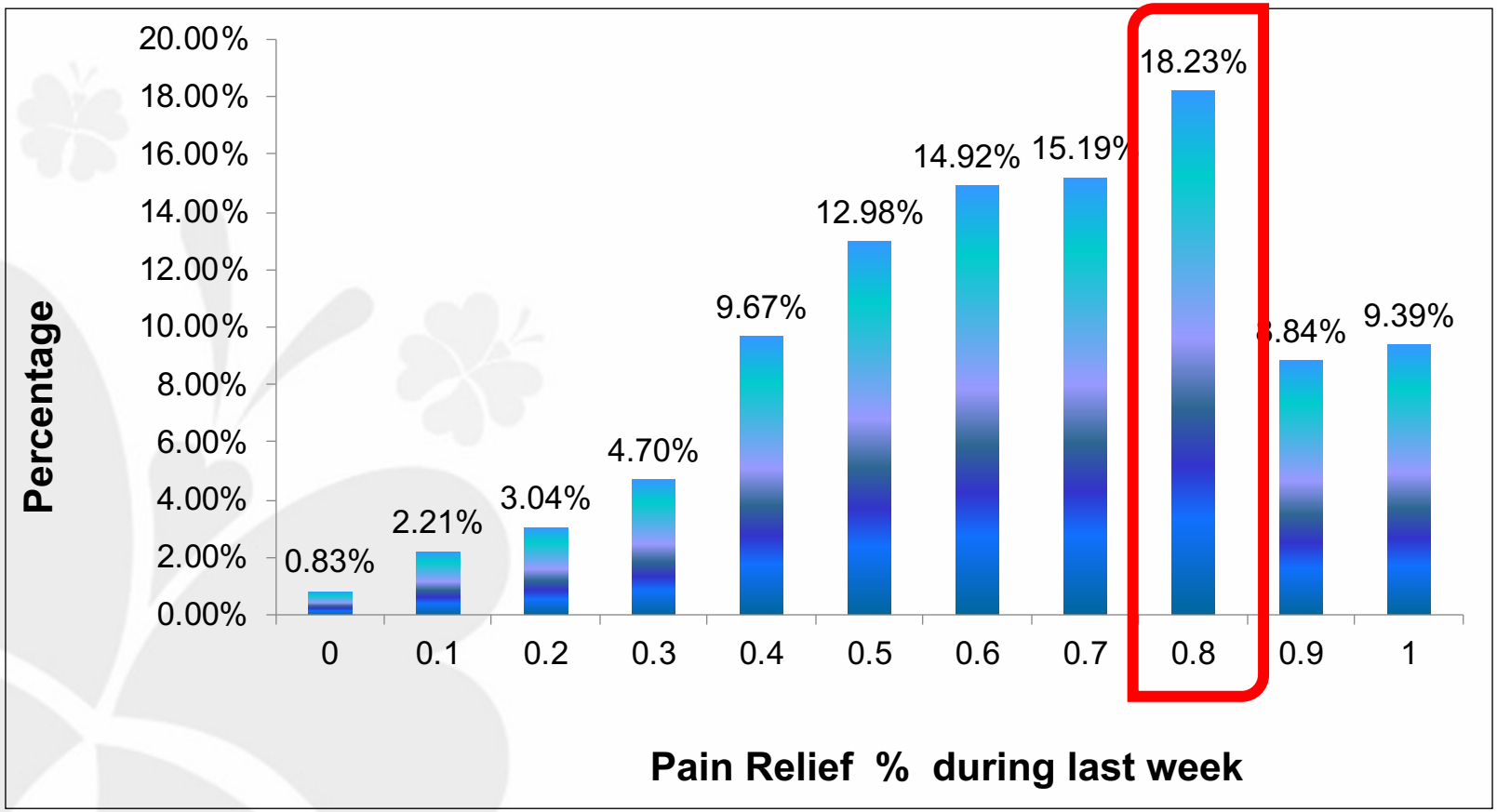
4. Pain Treatment Related Results

Duration of pain relief with medicine



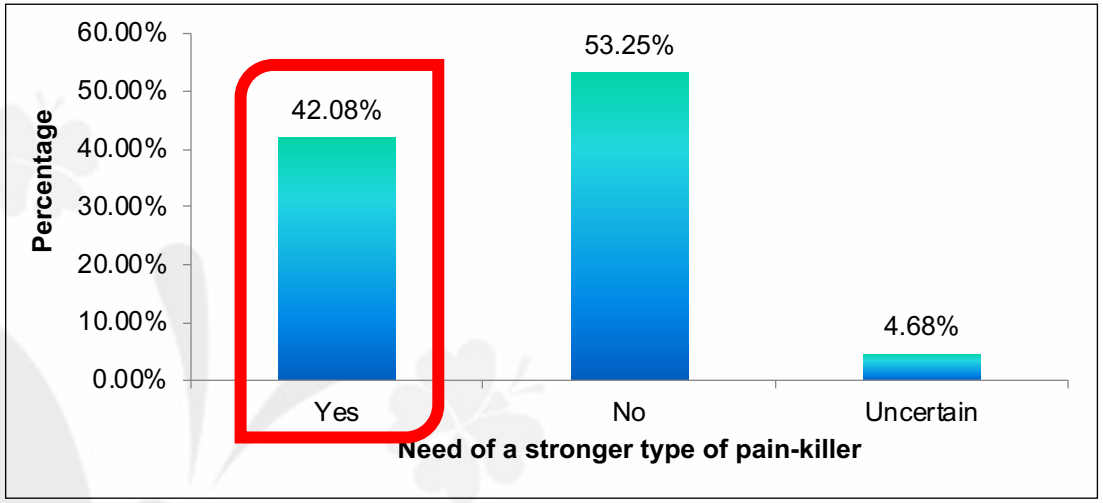
4. Pain Treatment Related Results

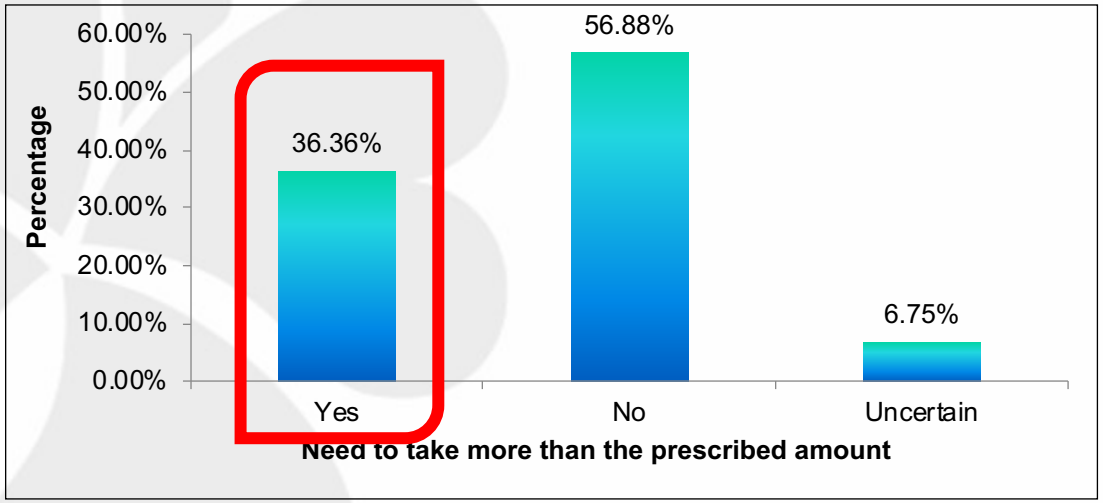
Degree of pain relief with medicine



4. Pain treatment related results

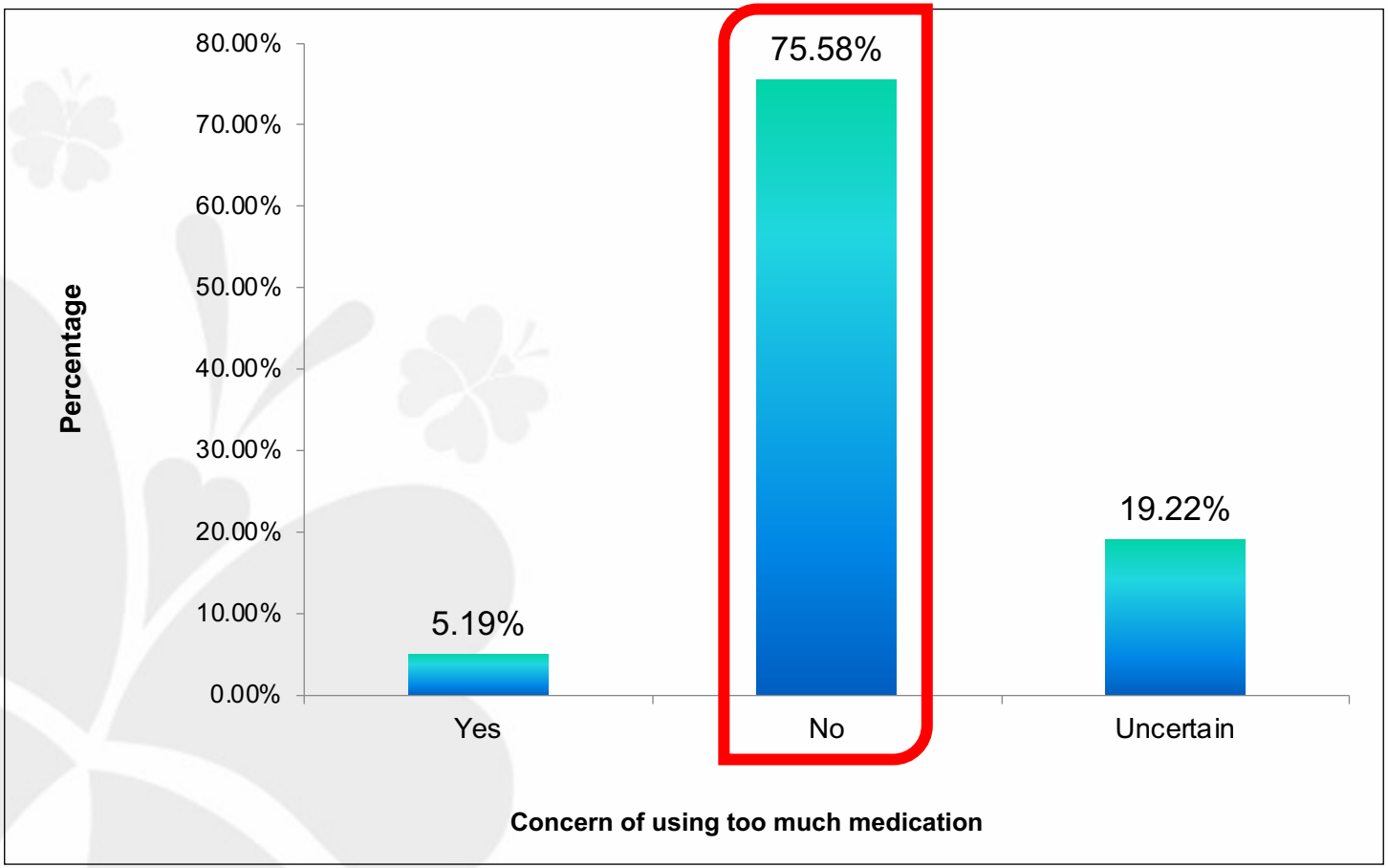
Need for more pain relief



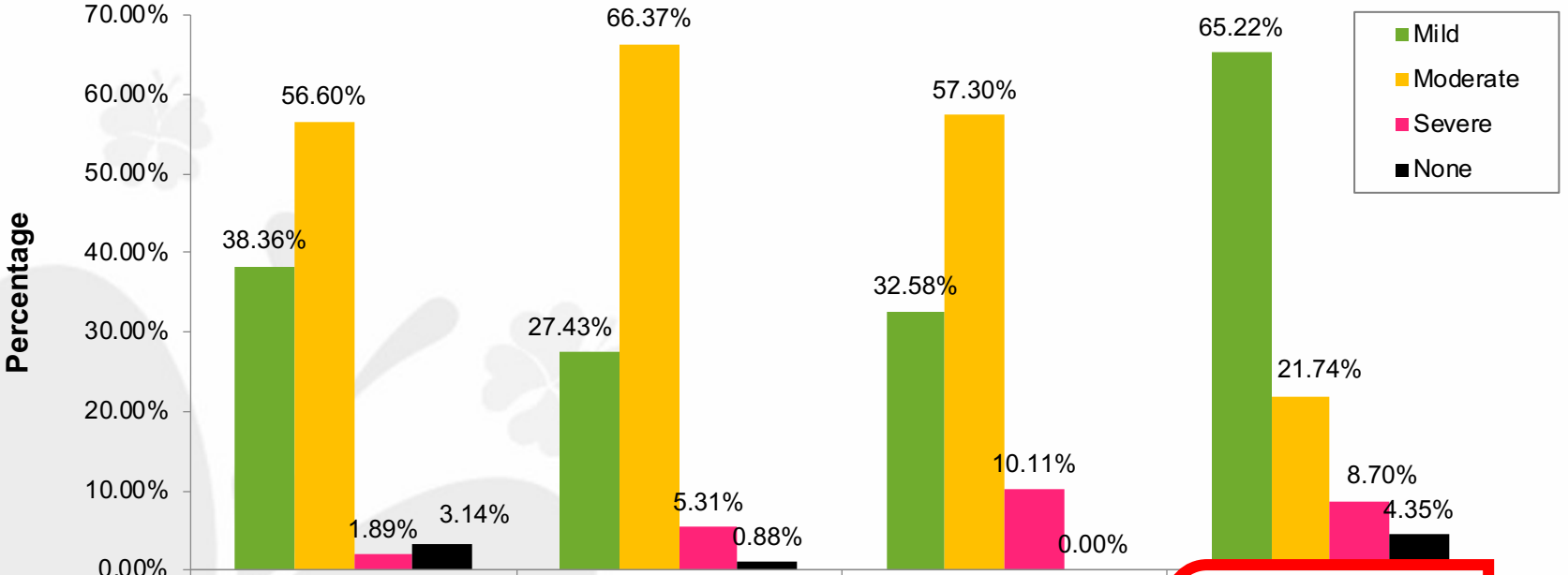


4. Pain treatment related results

Concerns of using too much pain medications



Ancillary analysis:
Analgesic level Vs Average pain



	Level I	Level II	Level III	Not on medication
Mild	38.36%	27.43%	32.58%	65.22%
Moderate	56.60%	66.37%	57.30%	21.74%
Severe	1.89%	5.31%	10.11%	8.70%
None	3.14%	0.88%	0.00%	4.35%

Drug Level

Associations & Correlations

With average pain

	Variables	Correlation Coefficient	Significance (2-tailed)
Average Pain	Site of pain	-0.167	0.000
Average Pain	Time since diagnosis	0.129	0.003
Average Pain	WHO Level of the drugs	0.085	0.042

Impact of surgical procedures

Underwent surgery or not	Mean (Average Pain)
Yes	3.96
No	3.98

p > 0.05

INFERENCES

- The results draw evidence to the fact that **pain is not optimally managed**.
  - A **third of patients suffering moderate to severe pain**

- We could **not account for adjuvants: indications not clear** on records.

- **77%**: identified **medication** to be the factor that **alleviates pain the best**
- **76%**: believed that they were **not on too much medicine.**
- **40%**: thought they **need more medicine for pain relief**

→ **Make available the analgesics and adjuvants as necessary.**

- Approximately **25% of the patients thought that they were on 'too much' medicine**. **Evidence based alternative and complementary therapies** which are known to alleviate pain must be made available to them.

- Nearly **67% unemployed**.

Psychosocial and spiritual determinants of pain must also be evaluated in relation to the Sri Lankan clinical setting and addressed accordingly.

- This calls on for an urgent **need to assess the barriers for optimal pain relief among cancer patients in resident oncology institutions in Sri Lanka.**

- One of our **attempts: Clinical audit aimed to optimize pain assessment in the same institution → human-resource related barriers**

On the bright side, the **said institution is now geared with a pain consultant. The pain team headed by her** perform **hospital round**s as required to manage particularly challenging cases.

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T . H . A . N . K . . . Y . O . U


QUESTIONS?
COMMENTS?
CONCERNS?