



IVETA GOLUBOVSKA, I. ČERŅAVSKA, S. ZADOROŽNIJS 29.09.23 IMPROVEMENT IN POSTOP PAIN OUTCOME-PATIENT PERSPECTIVE Baltanest 2023



11th International Baltic Congress of anaesthesioogy and Intensive care 28–30 September 2023, Tartu, Estonia Estonian National Museum



DISCLOSURES

- Educational grants: Berlin-Chemie, Sanofi-Aventis, Phizer
- Not related to the topic of this presentation

POSTOP PAIN OUTCOME

- What patients want to tell us?
- Can we really successfully deal with postoperative pain?

POST OP PAIN

The implementation of adequate postoperative pain management is of high significance in surgery, not solely from a physiological and pathological perspective, but also as an **ethical and financial** one.

More than half of patients undergoing surgical procedures report inadequate postoperative **pain relief** despite the increased scientific evidence and understanding in the area of postoperative analgesic care

Causes for under-treatment may arise due to the inherently subjective perception of pain, the wide range of management options, but also the limited transfer of recent scientific findings into the clinical base

Pogatzki-Zahn, 2017; Hussain Khan, 2017

Poqatzki-Zahn, 2017; Barbosa, 2017

Chou R, 2016; Hussain Khan, 2017

POST OP PAIN

- Postoperative pain physiology is complex but a vital protective feature that incorporate multiple interacting peripheral and central mechanisms
- Culture, personal beliefs, previous pain experience, expectations, and patient's ability to cope also are interfering factors of postoperative pain involvement
- Endorsing negative expectations is associated with lingering post surgical pain
- Recollection of severe postoperative pain

PAIN MEDICINE

Mark D. Willingham, M.D., Molly R. Vila, M.D., Arbi Ben Abdallah, D.E.S., Ph.D., Michael S. Avidan, M.B.B.Ch., Simon Haroutounian, M.Sc.Pharm., Ph.D. ANESTHESIOLOGY 2021; 134:915-24

ANESTHESIOLOGY

Factors Contributing to Lingering Pain after **Surgery: The Role of Patient Expectations**

POST OP PAIN

- Inadequate postoperative pain assessment or insufficient education of staff involved
- Many believe that pain simply is a symptom that will resolve. This conviction leads to actual neglect and disregard of proper treatment and diminishes the priority of acute pain as a protective warning sign
- Unrelieved acute pain can consequently affect the central nervous system in such way that patient's pain can be difficult to control in forthcoming settings and **consequently** lead to chronic pain

Carr, 2007



ORIGINAL ARTICLE

Chronic postsurgical pain in Europe

An observational study

Dominique Fletcher*, Ulrike M. Stamer*, Esther Pogatzki-Zahn, Ruth Zaslansky, Narcis Valentin Tanase, Christophe Perruchoud, Peter Kranke, Marcus Komann, Thomas Lehman, euCPSP group for the Clinical Trial Network group of the European Society of Anaesthesiology and Winfried Meissner

- Orthopaedic surgery clearly associated with a high incidence of CPSP
- Preoperative chronic pain proved to be an independent risk factor
- Spine surgery, knee arthroscopy and total hip and knee replacement-up to 39, 1%

Eur J Anaesthesiol 2015; 32:725-734

How patients feel about their pain treatment?





> J Pain. 2021 Jun;22(6):730-738. doi: 10.1016/j.jpain.2021.01.002. Epub 2021 Jan 20.

Desire to Receive More Pain Treatment - A Relevant Patient-Reported Outcome Measure to Assess Quality of Post-Operative Pain Management? Results From 79,996 Patients Enrolled in the Pain Registry QUIPS from 2016 to 2019

Marcus Komann¹, Philipp Baumbach², Ulrike M Stamer³, Claudia Weinmann², Christin Arnold², Esther Pogatzki-Zahn⁴, Winfried Meißner²

- Patients PROM might be helpful to understand individual pain experience and quality of pain management
- QUIPS pain registry
- 79, 996 patients, 10.7% reported D2RMPT max pain intensity >6
- Largest reduction in risk if patients were " allowed to participate in pain treatment decisions» or received sufficient treatment information

SCI REP, 2021,11

PROM

Sci Rep. 2021; 11: 22148. Published online 2021 Nov 12. doi: 10.1038/s41598-021-01597-5

Acute postoperative pain in 23 procedures of gynaecological surgery analysed in a prospective open registry study on risk factors and consequences for the patient

Jorge Jiménez Cruz,^{1,4} Angela Kather,¹ Kristin Nicolaus,¹ Matthias Rengsberger,^{1,6} Anke R. Mothes,^{1,5} Ekkehard Schleussner,² Winfried Meissner,³ and Ingo B. Runnebaum^{III}

- Prospective cross-sectional study based on the German registry for quality in postoperative pain^(QUIPS)
- Factors associated with higher pain intensity were younger age, chronic pain and surgery performed outside the regular day shift.
- Shorter duration of surgery, peridural or local analgesic and preoperative sedation reduced postoperative pain.
- Caesarean section and minimal invasive procedures were associated with the highest pain scores in the present ranking. Pain management of these procedures has to be reconsidered

PMCID: PMC8590005 PMID: 34773057



ORIGINAL ARTICLE

Status quo of pain-related patient-reported outcomes and perioperative pain management in 10,415 patients from 10 countries: Analysis of registry data

PAIN OUT Research Group Jena | Chinese PAIN OUT network Dutch PAIN OUT network | Méxican PAIN OUT network Serbian PAIN OUT network | Spanish PAIN OUT network French PAIN OUT network | Italian PAIN OUT network | Swiss PAIN OUT network | Irish PAIN OUT network | Belgian PAIN OUT network | Ruth Zaslansky

Economic and a first to

PAIN OUT quality improvement project

- 49% (15.3 -57.1) of patients in all wards (gen, orto, gyn) reported worst pain 7 >
- 24.3% (18.6-33.23) reported of being in severe pain over 50% in POD 1
- 57% of patients received 1 non-opioid
- 38% received 2 non -opioids (paracetamol most commonly used 65% (6-95%)
- NSAIDS administered to 57.5% (34.4-78.8)
- Median daily doses of the most frequently administered systemic opioids: Oxycodone 10 mg, Tramadol 100 mg, Morphine 10 mg

An international quality improvement and registry project Aim

To improve treatment of patients with post-operative pain

- Web-based information system
- More than 200 hospitals involved
- Largest network of clinicians involved in acute pain

- Postsurgical patients
- Postoperative day one (POD1)
- Minimum 6 hours in ward
- Patient consent age or over

PAIN OUT PARTNERS

PAIN OUT participants May 2016



PAIN OUT Partners up to 2021



- Patient Questionnaire
- Data from Patient Case
 - Demographics 0
 - Concomitant diseases 0
 - pre, intra and postoperative treatment: anxiolytics, analgesics, co-0 analgesics, type of anaesthesia
- Data basis

PATIENT QUESTIONNAIRE

1. On this scale, p	lease ind	ficate the	worst pa	hin you h	ad since	your surg	ery:		
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o pain							w	orst pain	possible
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PATIENT OUTCOMES QUESTIONNAIRE

P7. Since your surgery, how much pain roll of have you received?

Please circle the one percentage that best shows how much relief you have received from all of your pain treatments combined (medicine and non-medicine treatments):

0%	10%	20%	30%	4096	50%	60%	70%	80%	90%	100%
no relief									compl	ete relief

P8. Would you have liked MORE pain treatment than you received?

The No.

- P9. Did you receive any information about your pain treatment options?
 - ⊡ Yas ⊡ No

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12. Did yo	u use o	r receive a	any non	medidin	emethod	is to relie	we your	pain?		
TH Yes	-	No.								
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If yes, t	check a	I that ap	plyc							
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PAIN OUT TOS

- Hospital of Traumatology and Orthopaedics
- Since November 2022
- 3 wards: 2 Orthopaedics, 1 Trauma
- Analysed 182 patients so far

PAIN TREATMENT TOS

- Using almost all possible modalities
- We have our pain treatment guidelines and follow ups
- paracetamol, metamizol, COX-2 inhibitors, NSAIDS, combined medications as paracetamol/codeine, dexketoprophen/tramadol, dexametazone, gabapentin and opioids as rescue analgesics, midazolam as anxiolitic.
- RA in al possible ways according to PROSPECT recommendations: infiltration, fascial iliaca blockade, adductor canal blockade, pl brachialis blockade, epidural etc.

The following questions are about pain you experienced since your surgery.

P1. On this scale, please indicate the **worst pain** you had since your surgery:



10.0

9.5

9.0

8.5

8.0

7.5

7.0

6.5

6.0

5.5

5.0

4.5

4.0

3.5

3.0

2.5

2.0

1.5

1.0

0.5

0.0

1

Worst Pain





The following questions are about pain you experienced since your surgery.

P1. On this scale, please indicate the **worst pain** you had since your surgery:

0	1	2	3	4	5	6	7	8
no pain								wo

P2. On this scale, please indicate the **least pain** you had since your surgery:

I	0	1	2	3	4	5	6	7	8	
1	no pain								wo)

PAIN	3A	3B	5	TOS	P<0.05
WORST	5.77	5.42	5.27	5.53	ns
LEAST	2.77	2.19	1.27	2.22	0.003







3A	3B	5	TOS
36	31	30	32

80% 100% 90% always in severe pain

P5. Pain can affect our mood and emotions. On this scale, please circle the one number that best shows how much, since your surgery, pain caused you to feel ...

a. **anxious**

0	1	2	3	4	5	6	7

not at all

b. helpless

0	1	2	3	4	5	6	7
not at all							

Measurement/ ward	3A	3B	5
Helplessness	3.63	2.25	2.00
Anxiety	3.87	2.83	2.69

th, since your surgery, 8 9 10 extremely 8 9 10 extremely

TOS	P<0.05
3.22	0.006
2.75	ns

P11. Circle the one number that best shows how satisfied you are with the results of your pain treatment since your surgery:

0	1	2	3	4	5	6	7
extreme	ly dissati	sfied					



3A	3B	5	TOS	p<0.05
7.63	8.56	8.64	8.20	0.01

h the results of your 8 9 10 extremely satisfied

WOULD YOU LIKE TO RECEIVE MORE PAIN TREATMENT?%



3A	3B	5
31	26	11

TOS 25

HOW MUCH PAIN RELIEF HAVE YOU RECEIVED? %



3A	3B	5
61	67	73

TOS 66

WHAT ELSE WAS INTERESTING

- 120 patients with chronic pain, 75%
- Mean Chronic pain intensity 6.7 NRS
- Worst pain hip replacement 5.05 NRS, chronic pain has 89%
- Worst pain knee replacement 6.91 NRS, chronic pain had 88%
- Correlation between worst pain and chronic pain intensity hip p<0.05, r 0.234 knee p<0.05, r 0.276





ALLOWANCE TO PARTICIPATE IN THE DECISIONS



TEXT

PAIN OUT





Journal of Pain Research

Cosen Access Full Text Article

Towards Better Perioperative Pain Management in Mexico: A Study in a Network of Hospitals Using Quality Improvement Methods from PAIN OUT

> This article was published in the following Dove Press journal: Journal of Pain Research

- Medical literature in the native language
- Implementation of international guidelines
- Homepage about pain
- Algorithms, different types of operation
- Video about PCA pumps
- Video about regional anaesthesia methods
- Patient/relative education

ORIGINAL RESEARCH

open access to scientific and medical research

Dovepress

J CLIN MED 2023, 12, 4577

PAIN OUT



Article

No Success without Effort: Follow-Up at Six Years after Implementing a Benchmarking and Feedback Concept for **Postoperative Pain after Total Hip Arthroplasty**

Jan Reinhard * D, Loreto C. Pulido, Melanie Schindler, Amadeus Schraag D, Felix Greimel D, Joachim Grifka and Achim Benditz 😳

- 2014 and 2015, implemented a standardized multidisciplinary pain management. concept.. In 2016 implementation study stopped.
- The data showed a significant increase in maximum as well as activity-related pain (both p < 0.001) in 2021.
- Awareness of postoperative pain management seems to have decreased already six years after implementation.



CONCLUSIONS

Not all patients are receiving the best evidence-based care they deserve

We should ask the patients if they are satisfied with pain relief, we need a feedback and quality improvement

- We need pain service
- More detailed clinical guidance is needed for acute perioperative pain management in complex surgical patients





Thank You

