





THE AGA KHAN UNIVERSITY



3rd Biennial Virtual Conference of Society for Treatment and Study of Pain October 16-17, 2021

# 21st Annual AKU Pain Symposium and 5th STSP Research Symposium Let's Prevent Pain, A New Challenge

Organized by: Society for Treatment and Study of Pain in coloration with Department of Anaesthesiology and Continuing Professional Education, Aga Khan University Information: Shairoz Nafees 021-34864639 Registration: Conference Secretariat; 021 3493 0051 Ext. 4578/4584 Email: conf.sect@aku.edu

#### Highlights

- Hands-on workshop
- Online workshop
- State of the art lectures
- Panel discussion
- Research symposium
- Free paper presentation



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# **SPEAKERS**

#### Abdullah M. Kaki, MB, ChB, FRCPC



**Current appointment:** Professor & Consultant, Anesthesiology and Pain Medicine, Director of Pain Clinic, Faculty of Medicine, King Abdulaziz University, Jeddah, Saudi Arabia.

President and Founder of Saudi Society of Pain Medicine, Saudi Arabia

Chairman of Scientific Council, Saudi Pain Medicine Fellowship, Saudi Commission for Health Specialties, Saudi Arabia.

President of Saudi Board of Pain Medicine, Saudi Arabia Member of Arab Board, Chronic Pain Fellowship Committee Member of National CPR committee, Saudi Arabia

Member and Co-founder of Pan Arab Pain Management Union

Member of Pain Committee, WFSA since 2018 Member of editorial board, Saudi Journal of Anesthesia

Special interests: Pain Medicine; Pain Research; Pain

Education

### Akbar Jaleel Zubairi



Senior Instructor Orthopedics, The Aga Khan University. Fellowship Spine surgery, Queens Medical Center, Nottingham UK. Fellowship Spine Surgery, Armed forces Postgraduate

Medical Institute, Rawalpindi, Pakistan

FCPS (Ortho), The Aga Khan University

Member: NASS, AO Spine, Society of Spine Surgeons Pakistan.

Special interest in Pediatric and Adult spinal deformity.

#### Aliya Ahmed, FFARCSI, MHPE



**Current appointment:** Professor of Anesthesiology, Aga Khan University, Karachi, Pakistan **Special interest:** Postoperative pain management; Medical education; General anesthesia

#### Ahmed Nadeem Abbasi, MB,BS (Dow), FFR, FCSI (Ireland)

**Current appointments:** Consultant Radiation Oncologist Chairman, Radiation Oncology Trans Disciplinary Education Programs,

Professor, Radiation Oncology, The Aga Khan University, Karachi, Pakistan

**Special Interests:** International Educational Networking; Academic exchange Programs; Establishment of Site-Specific Tumor Boards across the country & region. • International networking in Cancer Service Development, Radiation Planning, Post-Graduate Education; Quality in Precision Radiation Planning

#### Azhar Rehman

**Current appointment:** Coordinator pain fellowship program. **Special interest:** Postoperative Acute Pain Management And Regional Anesthesia.

#### Farnad Imani, MD, FIPP



**Current appointments:** Prof of Anesthesiology, Interventional Pain Physician

### Anaesthesia, Pain & Intensive Care

Chairman/ Pain Research Center, Iran University of Medical Sciences, Tehran, Iran

Founder and Editor in Chief/ Journal of Anesthesiology and Pain Medicine

Founder/ Iran Society of Regional Anesthesia and Pain Medicine

**Special interests:** Regional Anesthesia and Pain Medicine; Research in Pain Medicine

### Gauhar Afshan



**Current appointments:** Professor of Anesthesia & Pain Medicine, Aga Khan University (AKU), Karachi, Pakistan. Chairperson, Pain Fellowship Program Member, Pain Management Committee, WFSA Member, Cancer Pain Guidelines Committee, WHO Secretary, Faculty of Anesthesia, College of Physician & Surgeons Pakistan.

Member, Editorial Board, 'Anesthesia, Pain & Intensive Care' **Special Interests:** Acute & Chronic Pain; Pain Research; Pain Education

# G. P. Dureja, MBBS, Dip (Pain Medicine), MD (Anesthesiology)



**Current Designation:** Director/Professor, Delhi Pain Management Centre, A-1/14 Safdarjung Enclave, Near Rajinder Dhaba, Delhi, India.

**Special interest:** Advanced Interventional Pain Management /Neuropathic Pain

#### Irfan Suleman, MD.

**Current appointments:** Assistant Professor of Anesthesiology and Critical Care Medicine, Johns Hopkins School of Medicine. Founding Director of Pediatric Pain Interventional Program, Johns Hopkins Children's Center.



Founding Program Medical Director of Multidisciplinary Pediatric Pain Rehabilitation Program at Kennedy Krieger Institute.

Special interests: Pediatric Anesthesia; Pediatric Pain.

#### Jamshed Akhtar, MBBS, FCPS (Pediatric Surgery), FRCS (Glasgow), FACS, MHPE (AKU), M Bioethics (AKU), PGD Biomedical Ethics (Karachi University)

**Current appointments:** Dean, Faculty of Pediatric Surgery, CPSP.

Member, National Bioethics Committee Editor JCPSP

Visiting Prof. Pediatric Surgery, National Institute of Child Health Karachi

Adjunct Faculty, University of Health Sciences, Lahore President, Pakistan Association of Medical Journal Editors (PAME)

**Special interests:** Pediatric Surgery, Medical Research; Medical Education

## Jonaid Shafiq, MBBS, PhD

Current appointments: Consultant Pain Management Specialist

Founder, Pain Medicine Unit, Bangabandhu Sheikh Mujib Medical University (BSMMU).

Managing Director of Japan Bangladesh Friendship Hospital & Navana Pharmaceuticals Limited Bangladesh.

**Special interests:** Interventional Pain Management; Pain Education; Pain Research

### Khalid Bashir, MCPS, FCPS



**Current position**: Consultant Anesthetist, Kaul Associates (Pvt) Ltd.

Incharge Pain Medicine, Hameed Latif Hospital, Lahore, Pakistan.

Dean, Faculty of Anesthesiology, CPSP Special interests: Pain Medicine; Regional Anesthesia; Medical Education

# Lutful Aziz, FCPS (Anesthesia), PhD (Anesthesia)

Current appointments: Senior Consultant and Coordinator. Dept. Of Anesthesia and Pain Medicine. Evercare Hospital. Dhaka, Bangladesh.

Director, Asia Oceania Society of Regional Anesthesia and Pain Medicine

Special interests: Regional Anesthesia; Pain Medicine

### Mary Suma Cardosa

**Current appointment**: Visiting Consultant Pain Specialist at Selayang Hospital, Malaysia.

Head, "Pain Free Program" of the Ministry of Health, Malaysia.

President, Malaysian Association for the Study of Pain (MASP)

Secretary, International Association for the Study of Pain (IASP).

Special interest: Pain education for healthcare professionals

Mohsin Nazir Butt, FCPS, M.Sc. – Epidemiology & Biostatistics (Clinical Research)



**Current appointments:** Assistant Professor, Department of Anesthesiology and Critical Care, Aga Khan University Karachi, Pakistan.

Director of Departmental Research Cell

Member of Medical College Research Committee (MCRC) at AKU.

Member, Institutional Ethics Review Committee (ERC). Member, Editorial Board, 'Anesthesia, Pain & Intensive Care' **Special interests:** Medical Research; Medical Education Muhammad Atif Waqar, MD, Fellowships in Hospice/Palliative Medicine, Fellowships in Geriatric Medicine



**Current appointments:** Assistant Professor; Chief, Section of Palliative Medicine, Department of Oncology, Aga Khan University (AKU), Karachi, Pakistan.

**Special interests:** Palliative Care service, community based palliative care, medical education

#### Nasreen Mushtaq



Current appointments: Section Head / Associate Professor, Pediatric Oncology/Neuro-oncology. Fellowship Director, Pediatric Neuro Oncology, AKU, Karachi, Pakistan. Founder of Pediatric Neuro-oncology Fellowship Program at AKU (first in Pakistan). Special interests: Pediatric Neuro-oncology; Head & Neck Pain in Children

# Rashid Iqbal, FCPS (Anesthesiology), FCPS (Pain Medicine)



**Current appointments:** Consultant In-charge, Pain Management Center, CMH, Rawalpindi, Pakistan. Supervisor, Pain Medicine fellowship Program at CMH Rawalpindi

**Special interests:** Chronic Pain; Low Back Pain; Pain Education

### Sadaf Altaf, MD, MSC FABP, FABPHO



**Current appointments:** Pediatric Hematologist/Oncologist. Assistant Professor Department of Oncology, AKU. Karachi. Pediatric Palliative Care in Pakistan

**Special Interests:** Pediatric Palliative Care; Bone and Soft Tissue Sarcomas; Stem Cell Transplant.

# Salman A. Saleem, FCPS, MSc (Pain Medicine)



**Current appointments:** Associate Professor, Anesthesia & Pain Management, Shifa College of Medicine, Islamabad. Consultant Anesthesia & Pain Management, Shifa International Hospital, Islamabad, Pakistan. General Secretary, Society for Treatment & Study of Pain (Pakistan).

Special interests: Chronic Pain; Cancer Pain Management

#### Takdir A.M. Musba



Current appointments: Lecturer, Department of Anesthesiology, Intensive Care and Pain Management, Hasanuddin University, Faculty of Medicine, South Sulawesi, Indonesia. Consultant in Pain Clinic and Palliative, Hasanuddin University Hospital and Wahidin Sudirohusodo General Hospital, Makassar, Indonesia. Member, International Association Study of Pain (IASP) since 2008 till now. Chairman, Association of South-East Asian Pain Society (ASEA-PS). President, Indonesian Pain Society (IPS) Member, Pain Management Committee of WFSA ( World Federation Society of Anesthesia).

#### Special Interests: Pain Management; Pain Education.

#### **Mughis Sheerani**



Current appointments: Consultant Neurologist, Sind Institute of Urology & Transplantation, Karachi, Pakistan. Consultant, South City Hospital, Karachi, Pakistan. Consultant, Neurogym, a Neuro rehabilitation Center in DHA, Karachi, Pakistan. Special Interests: Neurology; Neurorehabilitation

## Nabila Najam Soomro, FCPS (Physical Medicine & Rehabilitation)



**Current appointments:** Director, Institute of Physical Medicine and Rehabilitation, Dow University of Health Sciences, Karachi, Pakistan.

Professor of Physical Medicine, Institute of Physical Medicine and Rehabilitation, Dow University of Health Sciences Karachi, Pakistan.

**Special Interests:** Neuro-Rehabilitation; Pediatric Rehabilitation; Cardiac Rehabilitation

### P. N. Jain, MD, FAMS, FICA, FIAPM

#### Eric Krakauer, MD, PhD



**Current appointment:** Professor, Palliative Medicine, T*ata Memorial Hospital.* Parel, *Mumbai*, India. Former Head, Division of Pain, Dept of Anesthesiology, Critical Care & Pain, Tata Memorial Hospital, Mumbai, India. **Special interests:** Palliative Medicine, Interventional Pain Management

#### Sean Chetty



Stellenbosch University in Cape Town, South Africa. President, of Pain South Africa.

Africa Representatives on the Pain Committee of the WFSA. **Special Interests:** A passion for expanding medical educ**ation** 



Associate Professor of Medicine / Associate Professor of Global Health & Social Medicine, Harvard Medical School, Boston, MA 02115, United States Attending Physician, Division of Palliative Care, Massachusetts General Hospital, Boston, USA. Honorary Chair, Dept of Palliative Care, University of Medicine & Pharmacy, Ho Chi Minh City, Vietnam.

### Carolina Haylock-Loor, MD



Director of Programs of the WFSA Department of Anesthesiology, Critical Care and Pain Medicine Hospital del Valle, San Pedro Sula, Honduras

# **PAINCON 2021 ABSTRACTS**

# Integrating palliative care into healthcare systems: WHO guidance



#### Eric Krakauer, MD, PhD

Associate Professor of Medicine / Associate Professor of Global Health & Social Medicine, Harvard Medical School, Boston, MA 02115, United States Attending Physician, Division of Palliative

Care, Massachusetts General Hospital, Boston, USA.

Honorary Chair, Dept of Palliative Care, University of Medicine & Pharmacy, Ho Chi Minh City, Vietnam.

Palliative care is the prevention and relief of physical, psychological, social and spiritual suffering of adults and children living with serious illnesses and their families. It is an essential component of both primary care and specialized care both during treatment and at the end of life. It should be provided by primary care doctors and doctors specializing in oncology and in many fields, not mainly by palliative care specialists. And it should be provided in any healthcare setting including hospitals, skilled nursing facilities, community health centers, and in patients' homes. World Health Assembly Resolution 67.19 in 2014 states that palliative care "is an ethical responsibility of health systems" and that efforts to minimize risk of diversion of controlled medicines such as morphine for illicit purposes must "not result in inappropriate regulatory barriers to medical access to such medicines." Palliative care and disease-modifying or life-sustaining interventions often should be provided simultaneously for patients with serious illnesses and may be indistinct. For example, cancer chemotherapy or radiation therapy often is palliative, and palliative care may improve adherence to cancer treatment by relieving symptoms or adverse effects of treatment and by providing psycho-social support. The World Health Organization (WHO) recommends an essential package of palliative care consisting of a set of interventions; a set of safe, effective, inexpensive and globally available medicines; a small set of simple equipment; social supports for the very poor; and the necessary human resources with the necessary training at each level of health care systems: https://apps.who.int/iris/handle/10665/274559

Integration of palliative care, including home care, into public health care systems appears to not only improve patient wellbeing, but also to reduce overcrowding in referral hospitals, to provide financial risk protection for patients' families, and to reduce costs for health-care systems by reducing dependency on hospital inpatient and outpatient services. Thus, any initial investment needed for hiring and training adequate human resources and making the essential package universally accessible may result in cost savings.

# Teaching and training in pain medicine. The current challenges



#### Carolina Haylock-Loor, MD

Director of Programs of the WFSA

Department of Anesthesiology, Critical Care and Pain Medicine

Hospital del Valle, San Pedro Sula, Honduras

In 2009 the WHO published<sup>1</sup> '80% of the world population with moderate to

severe pain lacks adequate access to pain treatment', and this situation persists. In addition, an increasing global burden of pain, more notorious in LMICs, by trauma, postoperative, childbirth, arthritis, back pain, diabetes, cancer, HIV-AIDS, sickle cell disease, and now post-COVID–19 syndrome, among others, have resulted in more inequity and compelling a need for bridging the gap. On the other hand, this pandemic has raised many challenging situations. One of the global impacts, beyond the virus infection and pandemic measures, is in education and the trendy increase of the virtual and hybrid modalities.

Education in pain in undergrad is still poor, non-practical, non-formal, and a similar neglect occurs in medical residency programs in most countries independently of their income level.<sup>2,3</sup>

The World Federation of Societies of Anesthesiologists  $(WFSA)^4$ is a global organization representing anesthesiologists from 136 world societies and 150 countries worldwide. It strives to help ease the suffering caused by pain, training clinicians with the Essential Pain Management (EPM) course, which seeks to speak the same language for addressing pain. EPM is a trademark course co-branded by WFSA and ANZCA (Australia and New Zealand College of Anesthetists). It comprises brief interactive lectures, group discussions, break-out sessions, practicing the RAT system (Recognize, Assess and Treat) to approach pain patients, brainstorming to detect local, regional and global obstacles in the management of pain and, how to overcome these barriers. EPM program is sustainable; it brings local ownership and communities of practice. EPM is versatile and can be delivered entirely virtual,<sup>4</sup> with different teaching modalities, as the 'EPM Lite', a fourhour course for medical and nursing students. We aim to integer this training in their curricula, for them to begin their professional lives knowing how to manage pain. Therefore, we have started dialogues with the deans, and other decisionmakers to achieve this goal.

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# Pain research: experience of quality of publications from LMIC



The Tajdin Hussein Jaffer Endowed Professor of Anaesthesia & Pain Medicine, The Aga Khan University, Karachi. Pakistan Faculty, Pain Management Committee, World Federation of Societies of Anaesthesiologists

Gauhar Afshan, MBBS, FCPS

Secretary, Faculty of Anaesthesia, College of physicians & Surgeon

Three billion people live in low- and middle-income countries (LMIC) out of a total world population of 7.53 billion. The importance of LMIC research capacity has been recognized recently. It has also been emphasized that strengthening research capacity in LMICs is one of the most powerful, costeffective, and sustainable means of advancing health and development. At the beginning of 2000, LMICs accounted for 85% of the world's population, 92% of the global disease burden and only 10% of global funding for health research. This '10/90' gap is recognized for improving health research capacity development in LMICs. In this regard, a paradigm shift from health research to research for health is coming up and Global Forum for Health Research is also promoting this change. There is consistent evidence that LMIC governments do not prioritize research and have not built a supportive environment for research. Although international donors currently have supported to strengthen research capacity in LMICs, but that is not for the sustainable development. People can experience pain as an acute, chronic or a combination of both. Despite the advancement in pain management, inadequate & untreated pain remains a major disease burden and economic challenge. Untreated postoperative pain is the most predominant type of acute pain in LMIC. Most research especially clinical trials, currently available in PubMed, Google Scholar and other common search engines, has been conducted in developed countries Their findings might not be acceptable across the world, so it is essential to review the published research from LMIC. We conducted a systematic review recently to address this issue in LMIC. It was designed for postoperative pain management modalities employed in clinical trials for adult patients in LMIC. We found that over the past 10 years, clinical trials for postoperative pain were conducted in only 3 countries out of 47 LMIC.

It is essential to realize that improved healthcare in LMIC requires own data and evidence-based research for relevant and contextual standards of care in LMIC. I strongly recommend

the conduct of more RTCs on pain in LMIC based on the available resources rather than conducting them in accordance with the developed countries.

# Chronic pediatric pain; a multidisciplinary program

#### Shemila Abbasi

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It is a known fact that long term nociceptive and neuropathic pain does occur in children. The experiences of acute pain in early childhood, if not managed timely, can progress to chronic pain. These patients often present in pain clinics with neuropathic pain, musculoskeletal pain, headache, abdominal pain, cancer pain and pain in palliative care. Untreated pain in childhood can have increased risk for the subsequent development of pain and psychological disorders later in life. It creates fear and anxiety not just for the child but for the whole family. Seventeen percent of chronic pain in adults reported a history of chronic pain in their childhood with nearly 80% complaining that the pain in childhood persisted until adulthood (1). One of the common traits in these children is to hide their pain to avoid doctors and hospitals which further delayed the pain management.

There are dedicated pain clinics for children in developed countries. In our country, there is a need to recognize that children have pain and a dedicated team or program is required to diagnose and treat pediatric pain. An ideal place for this group to work needs a very colorful environment with lots of attractive activities and a dedicated team to give adequate attention and time.

How to assess pain is the foremost step after recognizing pain. While assessing the pain in children, the most common tool widely used by majority of physicians is Wong-Baker Faces pain rating scale, which is not applicable for every age. There is a desperate need to familiarize our physicians and nurses about different tools for the assessment of pain for different age groups. The multidisciplinary approach was discussed at length and concur the most appropriate method to address all components of bio-psychosocial model of pain. Though the individual setup has its own merits but also possess some limitations like deficient holistic management, overburdened physician and lack of continuity of care.

Pharmacological treatments are used on the basis of pain mechanism or targeting the pain associated symptoms. The long-term disability reported as 3% representing sleep disturbances, lack of confidence and physical activities, deficient peer group interaction, attendance in school and emotional dysfunction (2). Nonpharmacological techniques include pain rehabilitation programme with various modalities including physical therapy, active mind body techniques, psychological intervention, normalizing life and parent coaching. Physical activity must be "paced" with increments and aimed to restore normal function. Four "S" are important in normalizing life are sports participation, socializing, sleep (parents coaching for maintaining a discipline) and school attendance which shows a great response in these patients. There are different ways to build rapport with these children, accompanying parents and siblings is of great help. We must believe in what they are saying or complaining. It's important to engage them in their treatment plans and options, and role of assent and consent was stressed upon while treating a pediatric patient with chronic pain.

Pain physicians must work together by playing their part to bring the change by establishing a separate pediatric pain program with multidisciplinary approach.

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Establishing the validity and reliability of Pain Clinical Evaluation Exercise (P-CEX) tool for postgraduate trainee in a teaching hospital



#### Ali Sarfraz Siddiqui, FCPS

Department of Anesthesiology, Aga Khan University, Karachi, Pakistan.

**Introduction:** Assessment methods in anesthesia training programs are evolving from exclusively knowledge-based examinations to continuous performance-based assessment at trainee workplace. These assessments determine the

progression through training and ultimately to specialist practice. In order to improve workplace-based assessment and adding to objectivity in continuous assessment of anesthesia and pain trainee rotating in pain management clinic, P-CEX tool was developed and introduced in the Department of Anesthesiology. As this is newly developed assessment tool so this study is designed to estimate its validity and reliability of this tool.

**Methodology:** PG trainee of anesthesiology and pain fellow rotating in the out-patient pain management clinic at Aga Khan University will be included in this study. This study will be conducted in two steps;

Step # 01: The content validity of the instrument (P-CEX) will be calculated from the viewpoints of a panel of experts using a special assessment response form. The rating of panel members will be used to calculate content validity ratio (CVR), content validity index (CVI), and instrument comprehensiveness.

Step # 02: The reliability of the P-CEX tool will be calculated after the implementation of the tool. Inter-rater and intra-rater reliability of the P-CEX assessment tool will be calculated.

All statistical analyses were performed using statistical packages for social science version 19.0. The content validity ratio (CVR) and content validity index were calculated and modified kappa statistics was computed for the probability of chance agreement for each item. Agreement and Inter-rater reliability were measured by Kappa statistics.

**Results:** Content validity index (CVI) of the P-CEX tool came out to be 0.83. Inter- rater reliability is given in table 2. Participant feedback was very good regarding P-CEX tool. Mean chance of agreement between the raters was 72.22% while Inter-rater reliability as shown by mean Kappa Statistics for this tool was 0.54.

Opioid consumption following TAP-block versus intraperitoneal / incisional bupivacaine in patients undergoing major gynecologic surgery: a randomized controlled trial

#### **Akbar Mistry**

Department of Anesthesiology, Aga Khan University, National Stadium Rd, Aga Khan University Hospital, Karachi, Pakistan.

**Introduction:** Major gynecological surgeries are abdominal procedures with reported high levels of postoperative pain (1). Opioid analgesics are the gold standard for treating moderate to severe pain, however they are associated with poor patient outcomes and adverse side effects such as post-operative nausea and vomiting, ileus, constipation, and urinary retention after abdominal surgery. (2) In addition, there is dearth of good quality opioids especially in low and middle -income countries (LMIC). As per our knowledge, none of the previous studies have compared the use of local anesthetic in TAP block with intraperitoneal/ incisional infiltration of local anesthetics with epinephrine to assess opioid consumption in patients undergoing major gynecological surgeries. Use of a nerve block serves as a part of multi modal analgesia and plays a role in reduction of opioid consumption.

Methodology: This single-center, randomized double-blinded study was conducted at the Aga Khan University Hospital in Karachi, Pakistan. It was approved by the institutional Ethical Review Committee (ERC)(approved 24.04.17 reference number 4718-Ane-ERC-17) renewal of ERC on 19.04.19 (reference no 2019-119-3325)) and registered at http://clinicaltrials.gov (NCT04037878). A total of 135 patients were recruited for the study. Patients were randomly allocated into 3 different groups, namely TAP (T), infiltration (I) and control (C). All patients were given multimodal analgesia in the form of intraoperative IV tramadol (1 mg/kg), IV paracetamol 1g, followed by 1g 6 hourly and diclofenac 200 mg suppository at the end of the surgery and at 12 hours post op. Each patient was administered ondansetron 0.1 mg per kg. All of the patients were kept on patient controlled intravenous analgesia (PCIA) pumps and a record of total tramadol consumption was made. In addition to this standard care, group T received bilateral TAP block using 20ml of 0.25% Bupivacaine bilaterally, and group T received local infiltration into the wound and peritoneal cavity by the surgeon using 40ml of 0.25% Bupivacaine along with 5 micrograms per ml of epinephrine. Total tramadol consumption, pain scores, and side effects were recorded for up to 12 hours post-surgery.

**Results:** In the recovery room, the median tramadol consumption between group-C 55 [38-90] were significantly different from group-T 45 [15-60] (P-value = 0.335) and group-I 45[15-90] (P-value = 0.332). Cumulative tramadol consumption in milligrams were comparable among three

study groups at 1, 4, 8 and 12 hours post-operatively. During recovery room stay, pain score (NRS) more than 3 at rest was observed in 30.2%, 25% and 25.6% patients of group C, I and T respectively which was not statistically significant. In the recovery room post-operatively, 72% patients in the control group, 50% in the infiltration group and 46.5% patients in the TAP block group had moderate to severe pain (NRS more than 3) at movement that was statistically significant (p=0.034). Incidence of post-operative side effects and complications were comparable among patients of all three groups.

**Conclusion:** In this study the analgesic effect of either TAP block or infiltration/peritoneal instillation of local anesthetic was evident in the immediate postoperative period in PACU, when patients may have had moderate or higher pain. However, the pain scores in recovery were not significantly different between the three groups which could be because of higher opioid consumption in the control group.

#### **References:**

- Gerbershagen HJ, Aduckathil S, van Wijck AJ, Peelen LM, Kalkman CJ, Meissner W. Pain intensity on the first day after surgery: a prospective cohort study comparing 179 surgical procedures. Anesthesiology 2013; 118: 934-44.
- H.D. de Boer, O. Detriche, P. Forget Opioid-related side effects: postoperative ileus, urinary retention, nausea and vomiting, and shivering. A review of the literature Best Pract Res Clin Anesthesiol, 31 (4) (2017), pp. 499-504.

# Musculoskeletal symptoms and disorders, and related knowledge, attitude and practices among female textile workers in Karachi, Pakistan - A cross-sectional study

#### Ali Hussaini

Department of Anesthesiology, Aga Khan University, National Stadium Rd, Aga Khan University Hospital, Karachi, Pakistan.

**Background:** Occupational Safety & Health Administration (OSHA) of U.S. Department of Labor characterized musculoskeletal symptoms and disorders as ache, numbness, and a lack of motion in the affected parts of the body, such as: the shoulders, hands, neck and back (Occupational Safety and Health Administration, 2015). In developing countries, like Pakistan, occupational health concerns for women fail to be recognized due to the fact that they are primarily employed in the informal sector. General occupational health of females is compromised due to various socioeconomic factors, including poor working conditions and longer working hours. Women employed in the textile industry perform repetitive and monotonous tasks throughout the day, and therefore it is a vital need to determine their health status and factors impacting it.

**Objectives:** The aim of this study was to determine the prevalence of musculoskeletal symptoms and disorders (neck and upper limb) and to assess Knowledge, Attitude and Practices regarding musculoskeletal symptoms and disorders among female textile workers in Karachi, Pakistan. Approximately 311 female textile workers participated in this study.

**Methodology:** To assess the prevalence of musculoskeletal symptoms and disorders, we used the adopted version of Nordic Musculoskeletal Questionnaire (NMQ). NMQ is a

survey-based method frequently used for evaluating the musculoskeletal symptoms and disorders and possible linked psychosocial and labor risks. For assessing factors related to workplace setting, Occupational Health training, knowledge, attitude and practices (KAP questions) and individual factors, a structured questionnaire was developed and used. Data was be captured on EpiData and analyzed using SPSS 19. Percentages and frequencies were calculated for musculoskeletal symptoms and disorders, socio-demographic and work-related factors. Standard deviation (SD) and mean were calculated for age, duration of work and monthly income. For KAP variables, response were coded as "positive" or "negative". Those scoring "positive" will be considered as having good knowledge, attitude and practices.

Results: 253 (81.4%) of the female textile workers reported musculoskeletal symptoms. The Lower back was the most frequently affected region (71.7%), followed by shoulders (70.7%), neck (43.4%), forearm and elbow (24.4%), hands and wrist (20.6%), upper arms (15.1%) and upper back (5.1%). Self-reported average difficulty of pain was moderate, and most individuals (29.6-53.1%) reported duration of pain to be between 3-5 days. Nearly 69.5% female workers were very dissatisfied with their working space. Frequency of musculoskeletal complaints were popular among 26-35 years of age bracket. Higher monthly income, up to 5 years spent working in the industry, marital status and lower educational attainment all correlated positively with complaints. No significant relationships were identified for BMI or job type. In advance analysis marital status, educational attainment, time in the industry, insurance coverage, working postures, and leaves due to MSD related pain were significantly associated with musculoskeletal complaints for any region. Those with any complaints were more likely to have better knowledge and safer practices score.

**Conclusion:** To conclude, there is a high prevalence of musculoskeletal symptoms and disorders among female textile workers is high in economically developing countries. Preventive measures and worksite interventions are needed to reduce work-related musculoskeletal disorders in this population.

Key words: Musculoskeletal symptoms; Female textile workers; Occupational health; Textile industry; Women health

## Patients' experience with preoperative anesthesia clinic at Aga Khan University Hospital

#### Anwar ul Huda

Security Forces Hospital, Riyadh, Saudi Arabia.

**Background:** Preoperative assessment of surgical patients by anesthesiologists is an important to ensure patient safety. Preanesthesia clinics are designed to prepare patients for surgery. Visiting the anesthesia clinic before admission gives the patient a chance to discuss the appropriate choice of anesthesia, modality of postoperative pain relief and complications of anesthesia. Attending the clinic improves patients' understanding about anesthesia and increases their confidence in making an informed consent. Moreover, preoperative screening of the patients has shown to reduce the frequency of cancellation of elective surgeries. Patients' experience with preoperative anesthesia clinic needs to be determined to improve the services and ensure patient centered care. In this study we determined patients' experience with their visit to preoperative anesthesia clinic.

**Methodology:** It was a cross sectional survey conducted at the preoperative anesthesia clinic at Aga Khan University Hospital (AKUH), Karachi from March 22, 2019 to March 21, 2020. Data were collected after written, informed consent. One hundred and eighty-nine patients visiting preoperative anesthesia clinic were included. Quantitative data were presented as simple descriptive statistics giving mean and standard deviation. Qualitative variables were presented as frequency and percentages. Effect modifiers were controlled through stratification and chi square was applied. P-value of  $\leq 0.05$  was considered significant.

**Results:** A total of 189 patients visiting Preoperative Anesthesia Clinic, AKUH, Karachi, during the study period were included in this study. Eighty-seven (46%) were male and 102 (54%) were female. Mean age of the patients was 49.63 years. Out of 189 patients, 174 (92.1%) patients had good experience and found the clinic experience to be useful, while 15 (7.9%) were dissatisfied. Of the female patients, 88.8% were satisfied, while 97% of the male patients reported satisfaction.

**Conclusion:** Most patients perceived that attending Preoperative Anesthesia Clinic is useful before surgery and they were satisfied with the quality of care.

**Key words:** Patients' experience; Preoperative assessment; Preoperative anesthesia clinic

# Critical incidents reported during pain management; a three-year review in a tertiary care center

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**Introduction:** Provision of postoperative pain management is the primary goal of pain services. Safety with high-quality patient care requires a tool to ensure quality assurance. Critical incident reporting system was part of our anesthetic care management for last 25 years. Its value is well established in learning from mistakes and thus improving patient safety and systems. So four years back we designed 'Pain related critical incident reporting form" to ensure continuous quality improvement by collecting, presenting and discussing the reported incidents prospectively.

**Objective:** Our objective was to analyze the frequency and nature of incidents and to look for any harm to patients and improvement strategies.

**Methodology:** A prospective review of the critical incident record in the department was conducted from June 2018 until June 2021. The forms were filled anonymously and collected in drop box. Data entered in Statistical Package of Social Sciences version 19.0 (SPSS) which included specialty, diagnosis, Acute or chronic pain, time of incident, category of incident, type of error, level of harm and steps taken for improvement.

**Results:** A total 26 CIs were reported in the patient under care of pain management service in last three years. Human error (85%) was followed by system error (11%) and equipment failure (4%). Fifty seven percent reports resulted in no harm to the patient and minor, major physiological disturbance and morbidity in 27%, 8% and 8% respectively. Checklist for radiofrequency machine and provision of neck lead shield were the main stepwise improvement done in the system.

**Conclusion:** CI related to pain is a practical low cost tool to reflect on our practice and can be use for evaluation and improvement in the system.

Key words: Pain; Critical incident; Quality improvement; Adverse events

# Analgesic effect and functional improvement produced by radiofrequency ablation of genicular nerves in patients with advanced knee osteoarthritis

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**Objective:** To study efficacy of radiofrequency ablation for treatment of pain in patients with advanced knee osteoarthritis and compare effects among genders, right and left knees, and grades of osteoarthritis.

Study design: A quasi-experimental study

**Place and Duration of Study:** Pain Clinic of Armed Forces Institute of Rehabilitation Medicine Rawalpindi, from September 2019 to February 2020.

**Methodology:** Adults, > 50 years, with grade III and IV Kellgren-Lawrence grades of knee osteoarthritis, and at least score of 4 for 3 months on Numerical Rating Scale were consecutively included. Measurements were taken on Numerical Rating Scale and Western Ontario and McMaster Universities Osteoarthritis Index before and four weeks after fluoroscopy guided radiofrequency ablation of three genicular nerves around knee joint.

**Results:** Fifty patients (mean age:  $62 \pm 6.5$  years) were included. The median Numerical Rating Scale scores before and after intervention were 9 (range: 7-10) and 5 (range: 2-8) respectively (p<0.001). The mean Western Ontario and McMaster Universities Osteoarthritis Index  $50.3 \pm 18$  respectively (p<0.001). No complications were reported. The reduction in Numerical Rating Scale and Western Ontario and McMaster Universities Osteoarthritis Index scores after the intervention was significantly better scores before and after intervention were 76.7  $\pm$  13.4 and in females as compared to males ( p=0.023 and p=0.012 respectively) however, no significant change was observed for right and left knee or grades of knee osteoarthritis (p>0.05).

**Conclusion:** Radiofrequency ablation of genicular nerves around knee joint gives significant improvement in pain and body function in patients with advanced knee osteoarthritis and results are better in women.

**Key words:** Knee Joint; Osteoarthritis Knee; Radiofrequency ablation; Fluoroscopy; Interventional; Chronic pain; Genicular nerve