Results On acute pain perceptions, literature search highlights problems related to healthcare systems and misconceptions among healthcare workers, rendering pain alleviation, during emergencies and disaster, disregarded. On pain assessment, numerous studies emphasize the need for standardized self-reporting pain measurement tools, when it comes to evaluate a patient’s pain intensity and severity. Various treatment modalities exist that can successfully guarantee pain alleviation in almost any setting. Lessons acquired from environmental and military disasters emphasize on the use of interventional techniques, like peripheral nerve blocks.

Conclusions The problem of pain management extends far beyond a single country or a single ED. Physicians should recognize pain as a true emergency and treat it as such.

Ultrasound-guided regional anesthesia (UGRA) using femoral nerve block (FNB) and distal ischiadicus block (DIB) is a standard procedure for primary TKA. Local infiltration analgesia (LIA) is an alternate approach that applies the concept of surgical wound infiltration with local anesthetics, which gained widespread popularity because of ease of application, cost effectiveness and lack of apparent motor block.

The aim of our RCT was to evaluate LIA vs. UGRA concepts in TKA when dexmedetomidine is used as an adjuvant. Working hypothesis: periarticular LIA would have disadvantages over UGRA in terms of postoperative pain control.

Methods 50 Patients received LIA of the knee capsule during surgery with 60 ml ropivacaine 0.5% and 1 ml (100 mcg) dexmedetomidine or two single-shot USRA blocks (FNB and DIB) before surgery with 15 ml each of ropivacaine 0.5% and 0.5 ml each (50 mcg) dexmedetomidine. (Ethical Committee No. 32–239 ex 19/20, 16.12.2020).

Results The safety analysis showed significantly higher need for opioids in the LIA group with a median oral morphine equivalent of 42.0 [IQR 23.5 to 57.0] mg vs. 27.0 [IQR 0.0 to 33.6] mg (P=0.022).

Abstract B57 Table 1 Baseline characteristics

Conclusions Our study demonstrated a superior opioid-sparing effect of UGRA compared with LIA when dexmedetomidine was added. We observed a longer-lasting opioid-sparing effect compared with recently published literature, which may be due to the addition of dexmedetomidine. Multimodal analgesia concepts could be improved when LIA or UGRA techniques are combined with dexmedetomidine.