

Analysis of the severity of pain in the wounded during the conflict in eastern Ukraine and the effectiveness of pain management in the prehospital settings

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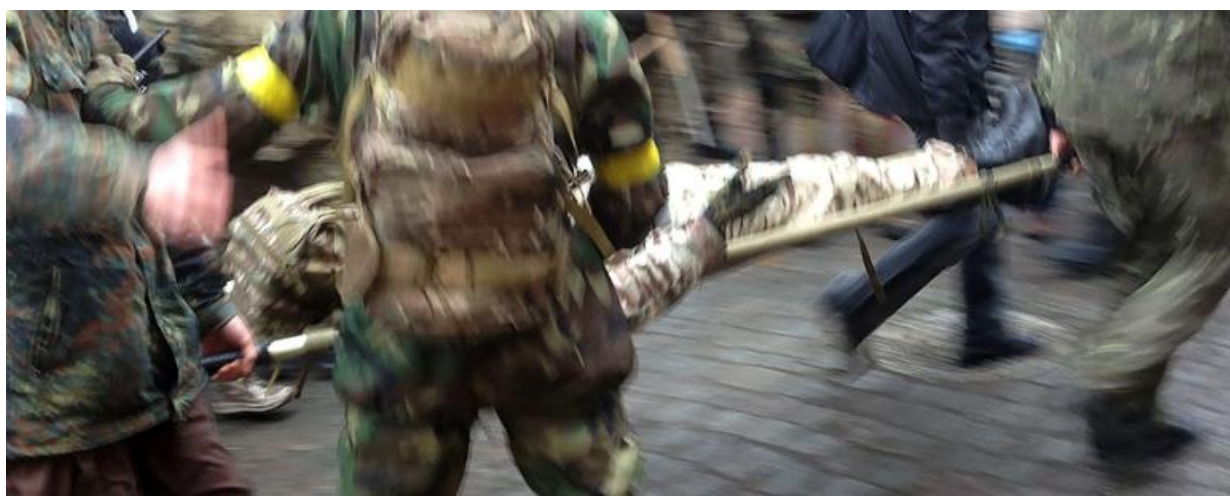
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Background

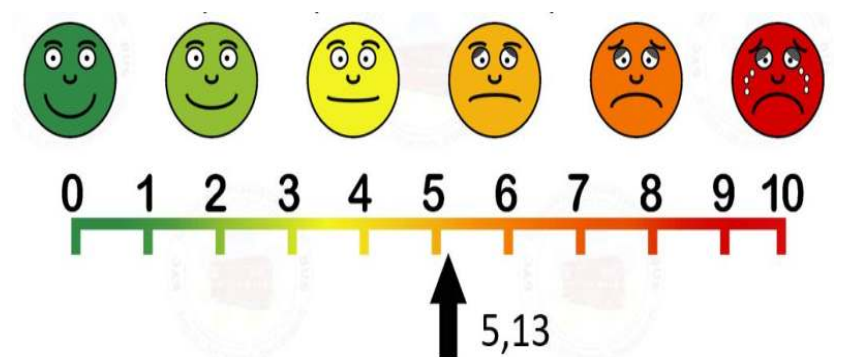
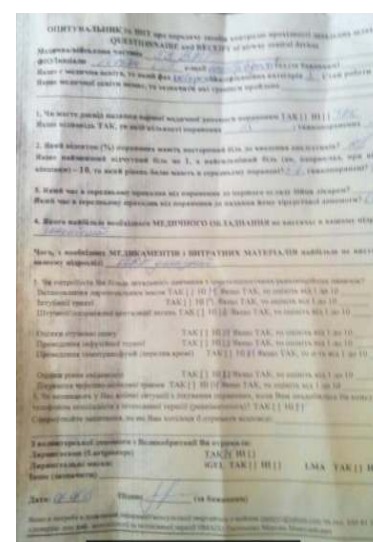
Ukrainian medics have been treating many wounded for about 3 years during the armed conflict in eastern Ukraine, but the problem of acute pain treatment remains unsolved.

The problem is mainly due to significant differences in terms and conditions of care, differences in the supply of medics. By this time agonist-antagonist of opioid receptors are available for the soldiers for severe pain self-treatment, but for the medics (even for physicians) efficient medication such as ketamine and fentanyl is not yet available at the prehospital stage.



Results

The questionnaire respondents estimated that they provided care to about 2,565 wounded, of whom 852 were severely injured. Unbearable pain occurred in $42 \pm 31\%$ of the wounded. The average level of pain was 5 ± 2 points (of 10-point scale). Assessment of pain depended neither on education (physician or other medical personnel), or length of service.



Of the surveyed anaesthesiologists 62% voted "FOR" the availability of opioid receptors agonist-antagonist for soldier's self-care of severe pain without a doctor or paramedic paramedics.

Goal of Study

The aim of the study is collection and analysis of information about the severity of pain and efficacy of pain management in wounded at the prehospital stage.

Materials and Methods

We have interviewed medics (physicians and nurses) who directly provided care for the wounded battlefield zone. 35 medics, including 15 doctors, anaesthesiologists agreed to complete the questionnaire.

The questions were next: 1) What percentage of wounded had the most severe (unbearable) pain before injection of analgesics? 2) What was the average level of pain in injured according to 10- point scale? 3) Do you agree with availability of opioid receptors agonist-antagonist for soldier's self-care of severe pain in the absence of physician or paramedics?



Discussion

These results indicate that the problem of pain relief of the wounded are still far from being resolved. So decision for reduction in availability of opioid receptors agonist-antagonist for soldier's self-care should be made only while increasing the availability to combat medics of effective analgesics such as ketamine and fentanyl, according to NATO standards.

Conclusion

Our preliminary data suggests that many wounded have unbearable pain and their analgesia is still not sufficient in the prehospital phase. Filling questionnaires is simple and efficient method to receive reliable information.

No of questionnaire	Quantity of injured	Quantity of severely injured	% with unbearable pain	Mean value of pain score in injured	Mean value of pain in severely injured	Mean time from injury to physician evaluation (min)
1				5	8	40
2	100	15	80	6,5	8,5	90
3				2	3	30
4						
5	100	51	13	7	5	12,5
6	275	83		3,5	8	
7	20	1	60	4	9	12,5
8	50	15	10	6	9	45