Index; Anatomy, Blood and Morbid contents. In experiment II - in response to Novel (trauma unrelated) sounds.
Methods: Experiment 1-56 participants with or without traumatic history viewed neutral ("writing desk") and traumatic ("a blood stain", "depressed women", "liver lobe") phrases. Experiment II – 32 participants with or without traumatic history listened auditory paradigm comprised of frequent (60%) 1000 Hz tones, rare (20%) 2000 Hz tones and rare (20%) Novel (trauma unrelated) sound such as clunks and buzzes. In both experiments, participant's EEG was recorded.
Results: Experiment 1 - PTSD participants exhibited enhanced cerebral activity to anatomy and blood phrases along with reduced activity in to morbid phrases. Control participant exhibited an opposite pattern (enhanced activation to morbid phrases along with reduced activation to anatomy and blood phrases). Experiment II - PTSD participants were characterized by enhanced cerebral activity to Novel sounds. This enhancement was evident at early time intervals (90-190 ms after stimulus presentation).
Discussion & Conclusions: The findings suggest that trauma may lead to allocating more attention to stimuli with salient perceptual information (possibly perceptually primed with the traumatic event) as well as enhanced activation of early, preconscious attentional mechanism. These findings concur with the neurocircuitry model associating PTSD with impaired Prefrontal ability to suppress hyperresponsivity within the Amygdala.

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Antibiotic Resistant Pathogens Causing Urinary Tract Infections (UTIs) in Israeli Soldiers: Prevalence and Molecular Features

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Introduction: UTIs are the major bacterial infections in the army, with a wide-spectrum of symptoms that affect soldiers' quality of life, fitness and function. Reports indicate a global increase in the prevalence of antibiotic resistant (AR) pathogens causing community UTIs. However, data on UTIs in Israeli soldiers is lacking.
Objective: To determine the prevalence of AR pathogens causing UTIs in the army and molecularly characterize them in order to understand spread and optimize antibiotic treatment.
Methods: Bacteria recovered from positive-urine cultures were prospectively collected (May2015-Dec2016) from IDF soldiers. Antibiotic-susceptibility-patterns were assessed (BDPhoenix), and extended-spectrum beta-lactamase (ESBLs)-production was confirmed using double-disk-synergy test. Molecular studies of ESBL-producing Escherichia coli (n=121) included ERIC-PCR-genotyping, phylotyping, E. coli sequence-type131 (ST131) identification, ESBL genes detection and ESBL-plasmid sequencing.
Results: A total of 2,443 *E. coli* and *Klebsiella* pneumoniae (Kpn) isolates caused UTIs. The major pathogen (91%) was *E. coli*. Ampicillin-resistance rates were 51% and 100% for E. coli and Kpn, respectively. 10.6% and 14% of E. coli and Kpn were multidrug-resistant (MDR). Non-susceptibility to nitrofurantoin was noticed among Kpn reaching-66%. The occurrences of ESBL-producing *E. coli* and Kpn were 7% (154/2,225) and 12% (26/218), respectively. UTI isolates exhibited 71 diverse AR profiles, suggesting the existence of numerous clones and AR genes. Two thirds of the ESBL-producing *E. coli* isolates belonged to virulent phylogroups but were clonally unrelated, contradicting soldier-to-soldier spread. 32% of these isolates belonged to the pandemic-highly-virulent clone, ST131. The major ESBL genes (91%) were CTX-M-type. ESBL-plasmids were large (87-152 Kb), diverse, transferrable and carried numerous AR genes.
Conclusions: UTIs in soldiers is mainly caused by *E. coli*, although Kpn is emerging. High AR rates including MDR were detected. ESBL-producing *E. coli* ST131 was found in high prevalence. This study may assist in understanding spread of resistant strains and optimize antibiotic therapy in the army setting.

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