

Jalal Solati¹, Gunther H. Moll², Oliver Kratz², Yulia Golub²

LPS EXPOSURE DURING EARLY PREGNANCY RESULTS IN REDUCED BASELINE ANXIETY AND INCREASED GAD67 EXPRESSION IN ADULT MALE OFFSPRING

¹Department of Biology, Karaj branch, Islamic Aazad University, Karaj, Iran

²Department of Child and Adolescent Mental Health, Friedrich-Alexander University of Erlangen-Nürnberg, Erlangen, Germany

jsolati@gmx.de

Background. Animal experiments have convincingly demonstrated that prenatal maternal stress affects pregnancy outcome and results in early programming of brain functions with permanent changes in neuroendocrine regulation and behavior in offspring. Current study aimed to evaluate the effects of prenatal exposure to the bacterial lipopolysaccharide (LPS) and maternal immune challenge on Anxiety-related behaviors and brain's GABAergic activity of male offspring.

Materials and methods. Pregnant NMRI mice were treated with intra-dermal injection of LPS (30, 60, 120, 240 and 480 µg/kg) at the 10th gestational day. Induction of the pro-inflammatory cytokines, TNF-α, IL-1β and IL-6 and corticosterone level were measured in maternal serum 1.5 h following LPS injection. Baseline anxiety level of male offspring (at postnatal day 60) were investigated using elevated plus mazes (EPM), glutamate decarboxylases level in the brain were measured through western blot technique. Anxiety level of stressed offspring measured after 2 hours restraint stress or TNF-α (10 µg/kg) administration.

Results. Our results show that LPS administration induces a significant increase in cytokines and corticosterone levels in maternal serum. However, in offspring prenatal LPS administration has no significant effects on serum cytokines and corticosterone levels and decrease baseline anxiety level while, pretreatment with restraint stress or TNF-α abolishes this anxiolytic effect. Prenatally LPS exposed offspring have an increased GAD67 expression, while no significant alteration in GAD65 level is observed.

Conclusion. Taken together, these results suggest that prenatal exposure to LPS during early pregnancy may result in, reduced baseline anxiety and increased GABA expression in adult male offspring.

Keywords: anxiety, lipopolysaccharide, cytokine, GABA.

V. Korostiy¹, I. Missmahl², O. Penderetska³, O. Polishchuk³, G. Krapivnyk⁴

THE EXPERIENCE OF PSYCHOSOCIAL ONLINE COUNSELLING PROJECT IN UKRAINE ON IPSO-CARE PLATFORM

¹Kharkiv national medical university, Kharkiv, Ukraine

²Ipsos, Germany

³Bukovinian State Medical University, Chernivtsi, Ukraine

⁴KNPU, Ukraine

vikorostiy@ukr.net

Background. In the last two years the problem of internally displaced persons has not lost its topicality and for Ukraine it has become a new severe challenge. Among the countries with the highest numbers of IDP Ukraine is on the 8th place in the world (2,45 % of IDPs out of a total number of population). Since October 2017 the project of Psychosocial Care for IDPs and the war affected population in Ukraine has been in place (short name «Let's talk»).

Objective. The aim of the project is to provide professional, accessible, free for the users and fully anonymous psychosocial online care. The project has been supported by the German non-for-profit public organization IPSO under the joint initiative of the Head of IPSO Inge Missmahl and Ukrainian specialists in psychosocial care, and funded by the grant from the Rotary International.

Materials and methods. Analysis of protocols of online counseling sessions and supervisions. The online counseling may be used by any person, but the target audience includes the people who in any way have been affected by the armed conflict: veterans, their families, internally displaced people etc. The counsellors are professional psychologists who were trained within the scope of the project. Sessions may be held in Russian or Ukrainian, according to the user's choice.

Results. The key and most frequent issues mentioned by the clients are loneliness, the loss of the sense of life, fear, uncertainty, anxiety, difficulties in family relations, in particular, with children, job insecurity, addictions, psychosomatic disorders and so others.

At the start of the operations the no-show cases were a significant problem: a client would register, select a counsellor, appoint the date and time of the session and would not show afterwards.

In our opinion, these cases of «mute» addresses have their reasons and implications:

- nobody is ensured against force-majeure circumstances (problems with Internet connection, urgent issues, worsening of health, sleep disturbances etc.);
- rarely, but still it happens that a user is a hooligan, a careless person with no sense of responsibility;
- more often a person is driven by curiosity: to see what is inside, find out how it works;
- sometimes curiosity is satisfied at the stage of self-diagnostics, and the wish to continue disappears;
- it happens that the intention to get care is genuine, but the person gets scared and steps back at the last minute;
- in some cases an appointment to a session provides minimum therapeutic effect as the person gets certain temporary relief from knowing that there is a place to address in case of need.

Essentially, information on the opportunity to get psychosocial online care is communicated via social media; therefore, to prevent no-show cases, a step-by-step procedure with the description of registration and counselling was made, which enabled to gradually reduce the number of addresses without actual online sessions with a counsellor from 81.8 % in October, 66.7 % in November, 50 % in December 2017 to 20.8 % in January 2018.

Talks with the representatives of the target audience, potential clients and counsellors revealed another problem, whose preconditions are to be further examined. However, they are closely related to the situation in the country (military operation, the division into «We» and «Other», the risk of provocations, the cases of treason and personal revenge, threats to the family members of the military). The above issue is in potential clients' inadequately high suspicion level (in some cases on the border of paranoid fantasies), which is manifested in the fear of the possible infringement of confidentiality, over-listening, surveillance, recording of talks etc. When presenting the project service, the focus is always made on the high level of data protection and strict confidentiality. Nevertheless, these arguments are sometimes ignored.

Conclusions. The online counseling is the way to provide professional, accessible, free for the users and fully anonymous psychosocial care. At the start of the operations the no-show cases were a significant problem: a client would register, select a counsellor, appoint the date and time of the session and would not show afterwards. Most frequent issues mentioned by the IDPs and the war affected population peoples are loneliness, the loss of the sense of life, fear, uncertainty, anxiety, difficulties in family relations, in particular, with children, job insecurity, addictions, psychosomatic disorders and so others. When presenting the project service, the focus is always made on the high level of data protection and strict confidentiality.

Keywords: IDPs and the war affected population peoples in Ukraine, psychosocial online counseling, PTSD, Internet-based trauma-focused therapy.