

## LETTER TO THE EDITOR

**Re: Role of Electromagnetic Field Exposure in Childhood Acute Lymphoblastic Leukemia and No Impact of Urinary Alpha-Amylase - a Case Control Study in Tehran, Iran***Asian Pac J Cancer Prev*, 17 (2), 877**To the Editor**

As one of the leading internet information platforms (EMF-Portal at RWTH Aachen University [www.emf-portal.org](http://www.emf-portal.org)) we systematically screen and summarize scientific research on the effects of electromagnetic fields (EMF). Thus we came across the publications by Tabrizi and Bidgoli (2015) and Tabrizi and Hosseini (2015) on prenatal and postnatal exposure to high voltage power lines and the risk of childhood acute lymphoblastic leukemia (ALL), both published in your journal in April and December 2015, respectively.

The case-control study by Tabrizi and Bidgoli (2015) was conducted in the city of Isfahan in Iran including 22 cases and 100 controls whereas the case-control study by Tabrizi and Hosseini (2015) was conducted in the city of Tehran in Iran, including the same number of cases and controls. Surprisingly, the results presented in tables 1 and 2 of both publications are identical with similar sized exposure groups leading to similar odds ratios and confidential intervals, also illustrated in the identical figure 1 in both publications. Both publications comprise identical or nearly identical text passages in the chapters 'Introduction', 'Materials and Methods', 'Results' and 'Discussion'.

In our opinion these studies constitute duplicate publications:

1. The only difference between the studies purportedly conducted in Isfahan and in Tehran was the inclusion of urinary alpha-amylase as a biomarker in the more recent publication. No explaining was given, why this parameter was studied. The republishing of the bulk of the earlier study should be stated and the former study should be referenced according to the rules of your journal ("The corresponding author is also responsible for written assurance that the submitted material or portions thereof have neither been published previously nor are under present consideration of publication by this or other journals." <http://www.apocpcontrol.org/page/information.php>).

2. The more recent study states in the discussion: "In present work we considered the etiology of ALL for the first time in Iranian population ..." (p7617, 4th paragraph). The same statement appears in the earlier publication (p2350, 3rd paragraph). Therefore both studies are obviously identical, which constitutes duplicate

publication and thus scientific misconduct. An editorial comment should be appended to the second study or the study should be retracted altogether.

The presentation of results in both studies lacks important details of exposure assessment. It is not clear how 'living near high voltage power lines' is defined and how the exposure to power lines was classified into 'yes' or 'no', or at which distance the cut point was chosen. Therefore, it is not possible to compare the results with the other numerous studies or to evaluate the scientific contribution to the topic of residential exposure to extremely low frequency magnetic fields and the incidence of childhood leukemia.

Because the studies fail to meet our quality criteria of the EMF-Portal and of general scientific conduct we will include the two publications from *Asian Pac J Cancer Prev* in the EMF-Portal with a disqualifying comment.

**References**

- Tabrizi MM, Bidgoli SA (2015). Increased risk of childhood acute lymphoblastic leukemia (ALL) by prenatal and postnatal exposure to high voltage power lines : a case control study in Isfahan, Iran. *Asian Pac J Cancer Prev*, 16, 2347-50.
- Tabrizi MM, Hosseini SA (2015). Role of electromagnetic field exposure in childhood acute lymphoblastic leukemia and no impact of urinary alpha- amylase - a case control study in Tehran, Iran. *Asian Pac J Cancer Prev*, 16, 7613-8.

**Dagmar Dechent\*, Sarah Driessen`**

*Research Center for Bioelectromagnetic Interaction, Institute of Occupational Medicine, University Hospital, RWTH Aachen University, Aachen, Germany \*For correspondence: dechent@femu.rwth-aachen.de*