Editorial

# Turkey's Selikoff

**Cem Terzi**

Dokuz Eylul University, Turkey

Like attacks on science, the harassment of a scientist is not a recent phenomenon. When Dr. Irving Selikoff began to publicize his now famous research on the health effects of asbestos in 1964, the industry started a multiyear attack on him and his research.[1] To his credit, Dr. Selikoff endured this sustained industry-generated harassment, and the scientific truth ultimately prevailed. While asbestos is still being exported from and used in some countries, credible scientists agree on its devastating health effects. Now, another scientist in Turkey is not only experiencing similar harassment, but also facing prison for informing people about air pollution and its serious consequences on health.

Kocaeli province is the second most important industry-intensive zone in Turkey. The town of Dilovası has a high concentration of industrial enterprises that bring with them serious environmental and health problems. As a physician aware of his social responsibility, Prof. Onur Hamzaoglu investigated the causes of mortality in this area. Prof. Hamzaoglu is a scientist and Chair of the Public Health Department at Kocaeli University Faculty of Medicine, whose research addresses the serious environmental and health problems that have been encountered in Kocaeli region for many years. He and his colleagues have published very important results over the last decade.[2–8]

Prof. Hamzaoglu and his colleagues found that the risk of death due to cancer for those living in the Dilovası area for longer than 10 years is 4.4 times greater than others residing there for shorter periods, independent from factors such as age and smoking.[3] After the first study on mortality due to cancer, Hamzaoglu *et al.* shared the results with scientists and local governors of the state. During that time, the topic received much interest. In 2006, the Turkish Grand National Assembly formed a commission to investigate the issue. Prof. Hamzaoglu presented his results and gave his opinion to the committee. The committee report, which was discussed in February 2007 at the National Assembly, recommended precluding further expansion of the industrial zone, modernizing old technologies in the existing factories, and other remedies meant to protect health. This report was shared with the public.[9]

Meanwhile, the Cancer Control Department of the Ministry of Health asked the Public Health Department of the School of Medicine, Kocaeli University, to conduct a new study on the causes of mortality in the Dilovası area. The findings of this study, which was conducted by Prof. Hamzaoglu and colleagues, along with the Kocaeli Provincial Health Directorate, also showed that 30.4 of 100 deaths occurring in Dilovası in the period 2000–2006 were caused by cancer.[7] These findings were officially shared with the university, provincial bodies and the Ministry of Health.

In spite of all these findings, no measures were taken for improvement and enterprises in the region continued to increase their capacity.

Due to this inaction, Prof. Hamzaoglu made a plan for a new study. In 2009, a new initiative was launched with faculty members from the departments of Child Health and Diseases and Medical Genetics of the School of Medicine, Kocaeli University[10] and the financial support of the University. This new project sought to compare air pollution in Dilovası, where there is serious environmental pollution, to the Kandıra district of the same province where there is almost no industrial activity. The researchers also planned to monitor healthy pregnant women volunteers living in both areas throughout their pregnancy, and measure heavy metals in colostrum and meconium samples after birth. In the final part of the project, newborns would be monitored until 18 months. The project was planned to be completed within 36 months.

The study conducted in the Dilovası and Kandıra districts found heavy metals in the colostrum of Dilovası lactating women over limit values set by the World Health Organization. The pollution had its impact on the foetus as well: lab analysis showed the existence of heavy metals such as lead, mercury, cadmium, arsenic and aluminium in meconium of newborns. All laboratory analysis was made in the labs of The Scientific and Technological Research Council of Turkey.

Correspondence to: C. Terzi, Dokuz Eylul University, Medical Faculty, Dept. of Surgery, Inciralti, Izmir, Turkey. Email: cem.terzi@deu.edu.tr

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In October 2010, news spread that the province''s fourth iron-steel plant would be established in an area very close to the provincial capital. Possible effects of this new plant on the nature and inhabitants of the area gave rise to serious concerns.

In January 2011, a journalist interested in the issue interviewed Prof. Hamzaoglu on the present situation in the province and possible health effects of a new plant. In this interview, Prof. Hamzaoglu stated that according to the measures and tests conducted to date, heavy metals were found in air and also in the colostrum of lactating women and meconium of their infants.

Immediately after the media coverage of this interview, both provincial authorities and officials from the Ministry of Health quickly launched a campaign of denial. In this campaign, it was first declared, ''there was no such pollution'', which was followed by the accusations of ''misinforming the public with the ''findings'' of yet uncompleted survey.'' The mayor of Kocaeli Metropolitan Municipality publicly accused Prof. Hamzaoglu of being a ''charlatan.''

Shortly thereafter, the mayors of Kocaeli Metropolitan Municipality and Dilovası Municipality submitted a petition to the Kocaeli Public Prosecution Office, demanding that the office file a criminal suit against Prof. Hamzaoglu. They claimed that he had intended to cause panic by saying ''We have detected zinc, iron, aluminium, lead and cadmium even in maternal breast milk in addition to blood and feces samples; thus, there is an enormous danger.'' Turkish law states that if a potential crime is related to academic conduct of a University faculty member, the University must give permission to Public Prosecutors before a suit may be pursued. The prosecution office forwarded the file to Kocaeli University Rectorate, to ask whether Prof. Hamzaoglu''s actions constituted legitimate autonomous scientific activity. A criminal investigation was initiated by Kocaeli University and is ongoing.

If the university permits, Prof. Hamzaoglu will be put on trial and face 2–4 years imprisonment in accordance with Article 213 of Turkish Penal Code.

Around the same time, the University also launched a disciplinary investigation against Prof. Hamzaoglu after the Cancer Control Directorate of Turkish Ministry of Health sent an official letter to The Council of Higher Education; and the Council submitted this letter for the review of Kocaeli University Rectorate and urged the Rectorate to take necessary action in this direction.

As part of the investigation, the Kocaeli University Rectorate asked the University Ethics Committee to investigate. The Ethics Committee of the university later sent Dr. Hamzaoglu its unanimous decision finding *''Sharing the information of an unfinished projectlits partial results with the community through the media is considered ethically negligent as the issue requires local and global sensitivity''.* On October 10, 2011, the Rectorate received the result of the disciplinary investigation, which said, ''According to the Ethics Committee decision, he is guilty and he should receive condemnation.'' In a letter informing Dr. Hamzaoglu of the verdict, the Rectorate reduced the Ethics Committee''s penalty of ''condemnation'' to ''warning''. The professor objected to this decision through his lawyers on October 17. As of early February, they are still waiting for an answer.

Unfortunately, the decisions of the University ethics committee and the Rectorate are a very brutal strategy for bending science. They are trying to use a very weak scientific misconduct complaint to discredit Prof. Hamzaoglu. He was accused of sharing information on unfinished project/its partial results with the community through the media. However, he only replied to a simple question: Is there a dangerous situation in Kocaeli in terms of public health? His answer was clear: Yes. His research as well as that of others had shown it before.[11] Moreover, his ongoing research was revealing health dangers, and he already had some disturbing laboratory results in hand. Indeed, Prof. Hamzaoglu presented his latest research results one month after his media message, at the National Public Health Congress in Trabzon in October 2011.[8]

Prof. Hamzaoglu produced unwanted research. Local authorities and the Ministry of Health are not happy with the results of his work. They would like to have a fourth iron-steel plant built in Kocaeli, and put pressure on the university to prevent opposition to the plant that Prof. Hamzaoglu''s research may have caused. Up to now, the Rectorate did not defend the University''s academician and his research, and instead adjusted to the authorities'' wishes.

The Turkish Medical Association asked a group of independent and very prestigious academicians with expertise in ethics (including) Prof. Ionna Kucuradi, president of the Philosophical Society of Turkey, the holder of UNESCO Chair of Philosopy of Human Rights to examine Prof. Hamzaoglu''s case. This board found no ethical negligence on the part of Prof. Hamzaoglu and concluded that his research, on the contrary, served a significant and important purpose.[12]

In the face of all these events, many academics from universities across Turkey are convinced that Prof. Hamzaoglu did exactly what needed to be done according to his social responsibility. An internet site in his support[13] collected more than 12,000 pledges of support, showing that Prof. Hamzaoglu is not alone. They declared that ''The people of Dilovası are our

beloved. Prof. Onur Hamzaoglu is our honour. We defend our mothers'' breast milk and our babies'' stool''.

Public opinion in Turkey has accorded the harassment the reaction it deserves: this year Prof. Hamzaoglu has received various awards including the most prestigious national award, the Turkish Medical Association''s Nusret Fisek Public Health Award.

On the one side, there are those who are upholding their economic and political interests over and above public health concerns. On the other we have honest professionals and academics siding with Prof. Hamzaoglu in efforts to protect and promote public health.

Since it is indeed difficult to believe, I want to state it once more: the Mayors of Kocaeli and Dilovası Municipality, as well as the Kocaeli Public Prosecution Office, hope to send a professor of public health to prison for informing his fellow people about air pollution and its serious health consequences.

I think the scientific community has to be informed of every incident of harassment, especially about this tragic one which has been going on in Turkey.

One of the primary functions of the university is to solve major societal problems in health and human welfare, such as disease, environmental pollution and poverty. Professors are a public resource for tackling complex medical, social, economic, and technological problems.

A university that embraces public-interest science may view its role as *agent provocateur*, nurturing its faculty to advance public welfare by investigating inequities, researching the cause of disease, and forecasting the impacts of new technologies or industries.[14]

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