

Health Impact Assessment and Capacity Building in a Newly Independent State:

The Case of Azerbaijan An Integrated Approach

Andruchow JE^{1,2}, Racioppi F², Soskolne CL¹, Martuzzi M²



Development of a Research Manual

- Designed as a self-help guide for novice researchers to address common practical issues arising during the conduct of research in regions such as the NIS
- Includes toolkits to aid researchers with study design, preparing a research proposal, obtaining funding, conducting a research project, disseminating and publishing study findings
- Preview of draft manual by potential readers (medical students and researchers) in Baku in February 2003; feedback used to improve content and style
- Translation into Russian and Azeri, with dissemination to universities and research institutions in Azerbaijan planned; broader dissemination to follow



Workshop previewing manual

Developing, Conducting, and Disseminating Environmental Health Research

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Major Advances in Azerbaijan to Date:

- Regional Chapter of the International Society for Environmental Epidemiology (ISEE) founded
- Non-governmental organization established for translation of relevant public health texts and instructional materials into Azeri
- Successful health impact assessment through active involvement of local partners
- Hands-on practical research experience imparted to local researchers
- More information available on the WHO/Europe website: www.euro.who.int/healthimpact

Environmental Epidemiology Training Courses

- Introductory and Advanced Environmental Epidemiology provided foundational theoretical knowledge for epidemiological research
- Jointly conducted by the World Health Organization (WHO) & University of Alberta, and funded by the United Nations Development Programme (UNDP)



Introductory Course – February 2000

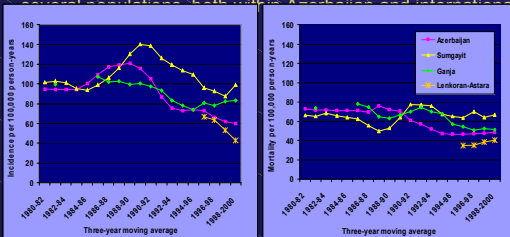


Advanced Course – December 2000

Practical Involvement in Study Conduct

- Local professionals directly involved in a cancer epidemiology study in the City of Sumgayit as a practical extension of the Training Courses
- Sumgayit founded as an industrial centre in the late 1940s; poor engineering and safety standards result in high levels of occupational and environmental pollution in the city
- Health impacts of these exposures assessed through a collaborative effort involving the University of Alberta, WHO, UNDP, and the Azerbaijan Republic Ministry of Health

- Cancer incidence and mortality rates for selected cancers compared among several populations both within Azerbaijan and internationally



Figures 1a, 1b. Three-year time weighted averages of crude cancer incidences (1a), and crude cancer mortality (1b) rates for selected regions of Azerbaijan, all cancers combined (ICD-9: 140-208).

Table 1. Univariate Poisson regression analyses of crude cancer data for the period 1980-2000, examining cancer risk in Sumgayit relative to the remainder of Azerbaijan (RR = Rate Ratio).

Cancer Site(s)	Crude Incidence Data		Crude Mortality Data	
	RR	95% CI	RR	95% CI
Larynx (ICD-9: 161)	1.39	(1.04, 1.85)	0.97	(0.80, 1.18)
Trachea, bronchus, lung (ICD-9: 162)	1.67	(1.45, 1.92)	1.07	(0.98, 1.17)
Urinary bladder (ICD-9: 188)	2.49	(1.93, 3.22)	1.46	(1.23, 1.74)
Female breast (ICD-9: 174)	1.21	(1.04, 1.40)	0.96	(0.85, 1.09)
All cancers combined (ICD-9: 140-208)	1.51	(1.43, 1.58)	1.08	(1.04, 1.12)



Sumgayit wastewater treatment plant

Ongoing Involvement

- Completed manual will be presented in an interactive workshop to researchers in Azerbaijan by 2004
- Encouragement of future research and investment in Azerbaijan and the NIS, particularly international partnerships with leading academic institutions
- Resource materials will be made available online



Data collection

Results

- Cancer rates in Sumgayit are elevated relative to comparison regions within the country, but low by international standards
- Health data quality and availability issues identified; recommendations made to improve the data collection process
- Study findings presented in Baku and Sumgayit in February 2003; local partners involved



Presentation of results in Azerbaijan



Author Contact Information:

¹University of Alberta, Edmonton, Canada

²World Health Organization Regional Office for Europe, European Centre for Environment & Health, Rome, Italy