Editorial

David Pittrow • Edgar A. Müller

Published online: 20 October 2010
© Springer-Verlag 2010

The *Journal of Public Health* covers a wide range of interdisciplinary topics, describing the social and individual factors determining the basic conditions of public health, analysing causal interrelations and offering a scientifically sound rationale for personal, social and political measures of intervention. In line with these aims, the present issue offers a wide and comprehensive range of topics across various fields.

With an estimated number of 17.5 million worldwide deaths in 2005, cardiovascular disease is one of the major public health problems. Cystatin C has become an important novel cardiovascular risk factor in that increased levels can elevate cardiovascular adverse events. The study by Faramawi et al. examined the association between the intensity of physical activity and serum cystatin C levels in the US adult population and found that physical activity can significantly decrease serum cystatin C levels. This suggests that decreased serum cystatin C levels may at least partly be responsible for the beneficial cardiovascular effects of physical activity.

Neumann et al. reported the follow-up results of the PACE-PAD study that investigated characteristics and outcomes of patients with peripheral arterial disease (PAD) and compared guideline-oriented treatment versus non-guideline treatment in the primary care setting. After an 18-month follow-up period, the authors reported an unexpectedly high rate of deaths and vascular events, confirming that PAD patients are at very high cardiovascular risk. While physicians appeared to focus on the

treatment of individual risk factors, rates of comprehensive PAD management in line with guideline recommendations were suboptimal.

Two studies looked at drug-related problems in society. La Torre et al. addressed the question of whether children and adolescents can be prevented from starting smoking through a school-based programme. The intervention programme included education on health-related effects of smoking, analysis of mechanisms that initiate smoking as well as refusal skills training. The study showed that significantly fewer children belonging to the intervention group as compared to children that did not receive intervention were smoking 1 year after the study, suggesting that targeting young children can be successful as a means for early prevention of starting smoking. In a second study, Czech and colleagues examined survey responses from individuals of different ages in rural communities in New South Wales, Australia, as part of the Alcohol Action in Rural Communities (AARC) project. They investigated whether communities would accept whole-of-community approaches to reduce alcohol-related harm. They found that such approaches meet significantly more acceptance in the population than other strategies including for example increased random breath testing, suggesting that this kind of strategy might be implementable as alcohol interventions.

Organic solvents, like halogenated hydrocarbons, are broadly applied in industry but can represent a source for hepatotoxicity. Mohammadi et al. investigated the effects of long-term exposure to aromatic solvents on the hepatic system comparing two different groups of workers in an auto manufacturing plant. The results show that the mean plasma alkaline phosphatase but not alanine aminotransferase and aspartate aminotransferase levels were significantly higher in employees working in the painting room as compared to those working in the assembly room,

D. Pittrow (✉) • E. A. Müller
3P Consulting,
Höhenweg 13,
82229 Seefeld, Germany
e-mail: pittrow@3p-consulting.com

demonstrating that non-permissible levels of a mix of aromatic solvents can cause mild cholestatic hepatic dysfunction.

In the context of an estimated up to 1.6 million deaths every year and 300–500 million clinical cases, *Plasmodium falciparum* malaria represents a major public health problem. Karunamoorthi et al. investigated the acquaintance of pregnant women in specialised antenatal clinics in Ethiopia with regards to malaria, insecticide-treated net (ITN) utilization and antimalarial drug treatment using a pretested questionnaire. The authors found that the majority of women were aware of malaria, how malaria is transmitted and had knowledge about ITN usage and antimalarial drug treatment, although there was a strong correlation between ITN usage and educational status, arguing for the need for novel communication strategies.

Herpes zoster, a disease caused by a viral infection with the varicella zoster virus, is the result of the reactivation of the latent virus and can cause a painful vesicular rash which is connected to considerable discomfort. Arnould and colleagues developed a model to demonstrate which parts of patient's lives are affected by herpes zoster and the resulting chronic pain. Analysing multiple data sets using their model, the authors conclude that all major domains of patient's lives are impaired by herpes zoster and/or chronic pain.

Viral infections can also be the aetiological cause for the development of malignant diseases and cancer as exemplified by cervical cancer caused by high-risk human papillomaviruses. Cancer is one of the worldwide biggest public health issues with more than 6,000 daily diagnoses in Europe alone of which half die. Katalinic and Plestina compare in their review article epidemiological indicators, incidences and mortality from cancer in Europe and Croatia and try to indicate current and future perspectives and the significance for public health. They give an overview of projects for prevention and early detection of cancer and

malignant diseases and indicate the need for understanding how to reduce cancer incidences and the associated mortality. Possible strategies to encounter cancer and fight malignant diseases are highlighted.

For the last 3 years, health insurance companies in Germany have been allowed to negotiate drug discount contracts (DDCs) with pharmaceutical manufacturers, which commit pharmacists to distribute the drug made by this manufacturer. Gröber-Grätz and Gulich investigated how DDCs are implemented in pharmacy routines, what implication they have in patients' drug supply and how they are accepted by patients, using a standardised questionnaire distributed to pharmacies in the German federal state of Baden-Württemberg. They found that patients were reported to be confused or angry about the non-transparency of drug substitutions and that DDCs caused significant extra work for pharmacists, e.g. customer counselling and education. In addition, DDCs were possible causes for medication errors, suggesting that they can present a significant risk factor for the health of patients.

Chan et al. investigated the relationship between the birth rate in Macau, which dramatically decreased from 1950 to 2006, and sociodemographic changes, economic instability and the availability of health resources. The retrospective study shows that a higher birth rate was associated with various social and economic aspects including greater public health care expenditure, higher marriage rates and for example fewer people working in the gambling industry. The authors conclude that sociodemographic disadvantage and impeded access to health care can significantly decrease birth rates.

Finally, Schneider discusses in his commentary conflicts of interest, usually due to links between medical research and related sectors of industry, and their impact on health care practice, policy and science. He urges the need to enhance awareness and transparency to deal constructively with conflicts of interest.