

Mass media and their influence on individual health: efficacy versus effectiveness

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Which sources will complement the flow of information between doctors and patients in the future? Where will healthy people find reliable medical information when they need it? Which interventions will influence people's behaviour concerning their own health?

About a decade ago, the answers to these questions seemed quite obvious: The internet and the related technologies would change the field of health information in a radical and profound way. At least, many experts made an optimistic prediction about these new technologies and channels (Coeira 1998; Eysenbach & Diepgen 1998; Hubbs et al. 1998; Butzlaff et al. 1998; Butzlaff et al. 2001). Technologies that would transport every detailed information, written or colourfully animated, into every household. Channels that would empower the people to communicate in both directions. Means of communication that would make no difference between the author and the reader of a piece of information. Or, in technical terms: Between the transmitter and the receiver. Conceptions of a multidirectional, interactive, uncensored information exchange which would broaden the role of the traditional mass media.

But what has become of these forecasts? Have the internet and the "new media" gained as much influence as expected? Or as feared? Description, analysis and evaluation of interventions to influence the health of the population is one of the main aims of public health. And – subsequently – of this journal (Abel & Kohlmann 2007). This issue of the International Journal of Public Health presents five articles addressing the questions outlined above (Dumitru et al. 2007; Hanewinkel & Wiborg 2007; Quentin et al. 2007; Schulz et al. 2007; Seematter-Bagnoud & Santos-Eggimann 2007). Three of them concentrate on the use of web-based information. The other two focus on the topic of Tobacco control in a setting of the traditional "uni-directional" mode of information transfer.

Dumitru et al. (2007) demonstrate in their national survey that the internet has achieved a high impact in the search for health-related topics as long as the numbers of users are counted. But when it comes to the importance (and credibility) of this technology, the impact diminishes rapidly and users tend to prefer more traditional ways of accessing information, especially the face-to-face conversation with a specialist. What makes surveys like this difficult is the task to define the term "health-related topics". Does it include wellness- or lifestyle-topics? Is a google search for low calorie cooking recipes a "health-related topic"? Also, we have to consider that the presented data are more than two years old. Quite a long time in the rapidly growing web. Trustable websites like Wikipedia, Patienten-information.de or Gesundheitsinformation.de were not as developed in Germany then as they are today. However, we are still convinced, that web-based information exchange will play an important role in the future of our health systems. It's the challenge for us, the health care professionals, to improve the quality and reliability of this technology and – above all – its content. Schulz et al. (2007) present a small pilot study with only twenty participants, which focuses on one of the main assets of the new technologies: The interactivity of users. While traditional media broadcast information from one source to many receivers, the internet encourages the exchange between individuals. This study showed a significant benefit for those who used a website about low back pain. The impressive results demonstrate that target group tailored patient information plus the possibility to exchange information between individuals can influence patient relevant outcomes. We are curious to see what the results of larger target groups will reveal.

In the third article concerning web-based knowledge transfer Seematter-Bagnoud & Santos-Eggimann (2007) show that the most important source for medical information

among older people is still the doctor, not the internet. Thus, they suggest, preventive services should be promoted by doctors for this target group. As the authors point out in their introduction: The generation which is familiar with the new technologies will reach the age of retirement in a few years. Further research on web-based health services will help to prepare useful offers for this age group.

Quentin et al. (2007) present a systematic literature review analyzing 24 international studies about the effect of tobacco advertising bans on cigarette consumption. The authors conclude that restrictions for tobacco- and cigarette-advertisement influences consumer behaviour positively, although the impact appears to be limited and the studies are difficult to compare. However, the modification of smoking behaviour remains a major challenge for health authorities all over the world. Banning advertisement for tobacco products remains one of many valid options.

Finally, Hanewinkel & Wiborg (2007) examine cigarette smoking in television programmes. The authors had to heroically watch and analyze 252 h of standard TV programmes. They found more smoking occurrences in German broad-

casts than in the other countries they compared. The authors point out that the influence of television imagery on adolescents can be one risk-factor to start smoking. The days when knowledge acquisition regarding personal health occurred solely between individuals are over. In a rural society one could talk with experienced friends or relatives (such as a grandmother) or even with the family doctor when one was ambiguous about one's own or one's families wellbeing. The rather young phenomenon of "mass media" – first newspapers, later radio, cinema and television – had a broad influence on health-related knowledge and behaviour. An influence that could both promote health (as in immunization campaigns) and harm health (as with tobacco ads or smoking in movies) (Noar 2007). Internet-technologies add two revolutionary new features to the abilities of mass-media: Individualization and interactivity. The Public health community would be well advised to continue its efforts in understanding and researching the influence of these media. And learn more about utilizing these tools.

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