

CASE STUDY

CcTalk! COMMUNICATING EFFECTIVELY WITH HIGH-RISK POPULATIONS IN AUSTRIA: A FIVE-STEP METHODOLOGY

Authors: T. Grothmann (Training und Beratung/Carl von Ossietzky Universität Oldenburg, Germany); A. Prutsch, M. Leitner, N. Glas, V. Wirth, (Umweltbundesamt, Austria); B. Wanschura, W. Gerlich, F. Lorenz, S. Gartlacher (PlanSinn, Büro für Planung und Kommunikation GmbH, Austria).

CONTEXT

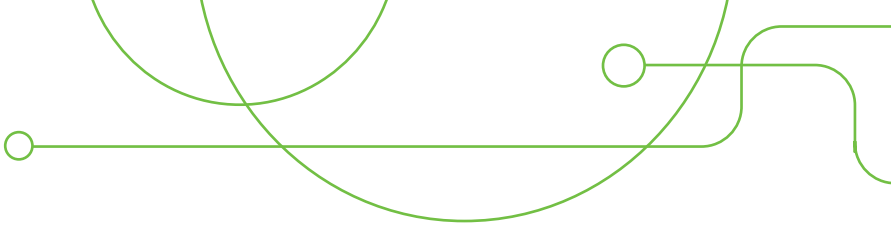
Due to climate change, excessive heat and heat waves are a growing threat to public health, in particularly to the elderly. The most widely documented policy for reducing heat vulnerabilities to date is the adoption of heat warnings and air quality alert systems to trigger emergency responses (20). Nevertheless, the evidence for their positive impact is limited and the most vulnerable groups are not being adequately reached (21). In order to reduce the vulnerability of elderly people to heat waves in Austria, we developed and tested a more effective communication approach as part of the CcTalk! Project.

NEW APPROACHES

We designed and applied an efficient five-step-methodology (22):

1. Target group selection: Via a multi-criteria assessment (including criteria such as expected negative climate change impacts on the group and options for protective behaviour in the group), we looked at various potential target groups, e.g. family doctors, pharmacies and nursing homes. We identified mobile health care nurses as one of the most important target groups in Austria. They can act as multipliers of knowledge, motivators of protective behaviours among vulnerable elderly and as protectors (such as measures to cool down patients' bodies) and thereby partly compensate for the lack of self-protective behaviour among the elderly.



- 
2. Target group analysis: Interviews with mobile health care nurses in Austria identified psychological drivers of and barriers to their current protective behaviour during heat extremes. Prevalent drivers include: climate change perceptions; control beliefs; role models; and consideration of heat and health. Barriers include fatalism and work stress. Furthermore, we identified information needs and preferred information channels of nurses themselves.
 3. Development of communication formats: To specifically address the drivers of and barriers to protective behaviour, as well as the expressed information needs and preferred information channels, we designed four communication formats:
 - An innovative social learning workshop for mobile health care nurses (led by a medical doctor and an experienced mobile health care nurse), allowing face-to-face communication.
 - A brochure (30 pages) providing detailed information on health risks of heat extremes, protection measures before and during heat events, diagnosis and treatment of heat-related diseases.
 - Two animated videos (each one minute long), suited to convey basic information on the heat and health topic in an entertaining, emotionalizing and thereby motivating manner.
 - A flyer (two pages) conveying basic information on health risks of heat extremes, protection measures before and during heat events and symptoms of serious heat-related diseases that require emergency medical services.
 - The social learning workshop and the brochure were mainly designed for the mobile health care nurses, whereas the animated videos and the flyer were mainly aimed at the elderly and their relatives.
 4. Pretest of communication formats: The four communication formats were pretested in focus group workshops with mobile health care nurses (combining individual evaluations by questionnaires and collective evaluations by open-ended discussions). Very positive evaluations of the formats revealed that they were effective in increasing heat risk awareness, heat risk competence and protective behaviour, but that some minor modifications to the formats would be useful.
 5. Improvement of materials formats: Based on the focus group results, we modified the formats to further improve their effectiveness and practical usability. For example, the social learning workshop concept was changed to be organized as a co-production of knowledge and mutual learning process between the participants.

Climate Services for Health

Improving public health decision making in a new climate

Figure 4.13 Screenshots from animated CcTalk!-videos to convey basic information on the heat and health topic in an entertaining, emotionalizing and thereby motivating manner.



ACKNOWLEDGEMENTS

This work was supported by the Klima- und Energiefonds, Austria, within the Austrian Climate Research Programme (ACRP); grant number KR11AC0K00183.

PROSPEKTIVUM FÜR
UMWELT & GESUNDHEIT **umweltbundesamt**[®]

PlanSinn.at
Planung & Kommunikation

DR. GROTHMANN
Training & Beratung

BENEFITS AND LESSONS

Two aspects particularly differentiate the five-step methodology presented here from current practice in climate services for health. First, the methodology builds on psychological knowledge about determinants of protective behaviour regarding health risks (23) and on psychological methods for designing behaviour change interventions (24). Second, the methodology includes an evaluation of the communication formats by focus groups and thereby addresses the lack of evaluations in current practice of climate change adaptation communication (25) and interventions regarding health risks of heat waves (26).

The five-step methodology has proven effective to produce communication formats that can motivate protective behaviour during heat extremes. The methodology can be generalized to other activities where awareness, competence or behaviour can be increased by means of communication. However, the methodology does not provide exact rules, neither for the selection and development of communication formats based on the target group interview results nor for the improvement of the formats based on the focus group workshop results.

REFERENCES

AUSTRIA

20. Harlan SL and Ruddell DM. Climate change and health in cities: impacts of heat and air pollution and potential co-benefits from mitigation and adaptation. *Current Opinion in Environmental Sustainability* 2011 Vol 3(3). Pp 126-134.
21. Bassil KL and Cole DC. Effectiveness of Public Health Interventions in Reducing Morbidity and Mortality during Heat Episodes: a Structured Review. *International Journal of Environmental Research and Public Health* 2010 Vol 7. Pp 991-1001. doi:10.3390/ijerph7030991
22. Grothmann T et al. A Five-Steps Methodology to Design Communication Formats That Can Contribute to Behavior Change: The Example of Communication for Health-Protective Behavior Among Elderly During Heat Waves. *SAGE open* 2017. Pp 1-15. doi: 10.1177/2158244017692014.
23. Prentice-Dunn S, McMath BF and Cramer RJ. Protection motivation theory and stages of change in sun protective behaviour. *Journal of Health Psychology* 2009 Vol 14. Pp 297-305.
24. Abrahamse, W and Matthies E. Informational strategies to promote pro-environmental behaviours: Changing knowledge, awareness, and attitudes. In Steg L, van den Berg AE, and de Groot JIM (Eds.), *Environmental Psychology: An Introduction* (pp. 223-232). 2012. West Sussex, England: Wiley-Blackwell.
25. Wirth V, Prutsch A and Grothmann T. Communicating Climate Change Adaptation – State of the Art and Lessons Learned from Ten OECD Countries. *GAIA* 2014 Vol 23(1). Pp 30-39.
26. WHO – World Health Organization. Protecting health from climate change: Global research priorities. 2009. Geneva, Switzerland: World Health Organization.

This case study was featured in WHO/WMO. (2018) *Climate Services for Health: Improving public health decision-making in a new climate*. Eds. J.Shumake-Guillemot and L.Fernandez-Montoya. Geneva.

To read any of the other 40 case studies featured in this publication, please download the full version here:

<https://public.wmo.int/en/resources/library/climate-services-health-case-studies>