

Prevention of skin cancer caused by natural UV irradiation for outdoor workers: Development of a curriculum for multipliers as a result of the project “ForMula UV”

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Introduction

- With the recognition of ‘*squamous cell carcinoma or multiple actinic keratosis of the skin caused by natural UV irradiation*’ as **occupational disease no. 5103**, their prevention is of utmost importance.
- In Germany, **2.5 – 3 million outdoor workers** (e. g. farmers, construction workers, seafarers) are exposed to the sun for a major part of their working time.
- Multipliers** (e. g. occupational physicians, safety engineers, employees of the accident insurance such as technical inspectorate) are pivotal to address outdoor workers. By advising and supporting outdoor workers, they play a key role concerning the planning and implementation of appropriate UV protection (see figure 1).
- It was the aim of the project **ForMula UV** (*‘Konzeption einer Fortbildung für Multiplikatoren zur Prävention von Hautkrebs durch natürliche UV-Strahlung bei Beschäftigten in Außenberufen’*) to develop a target group-specific curriculum.

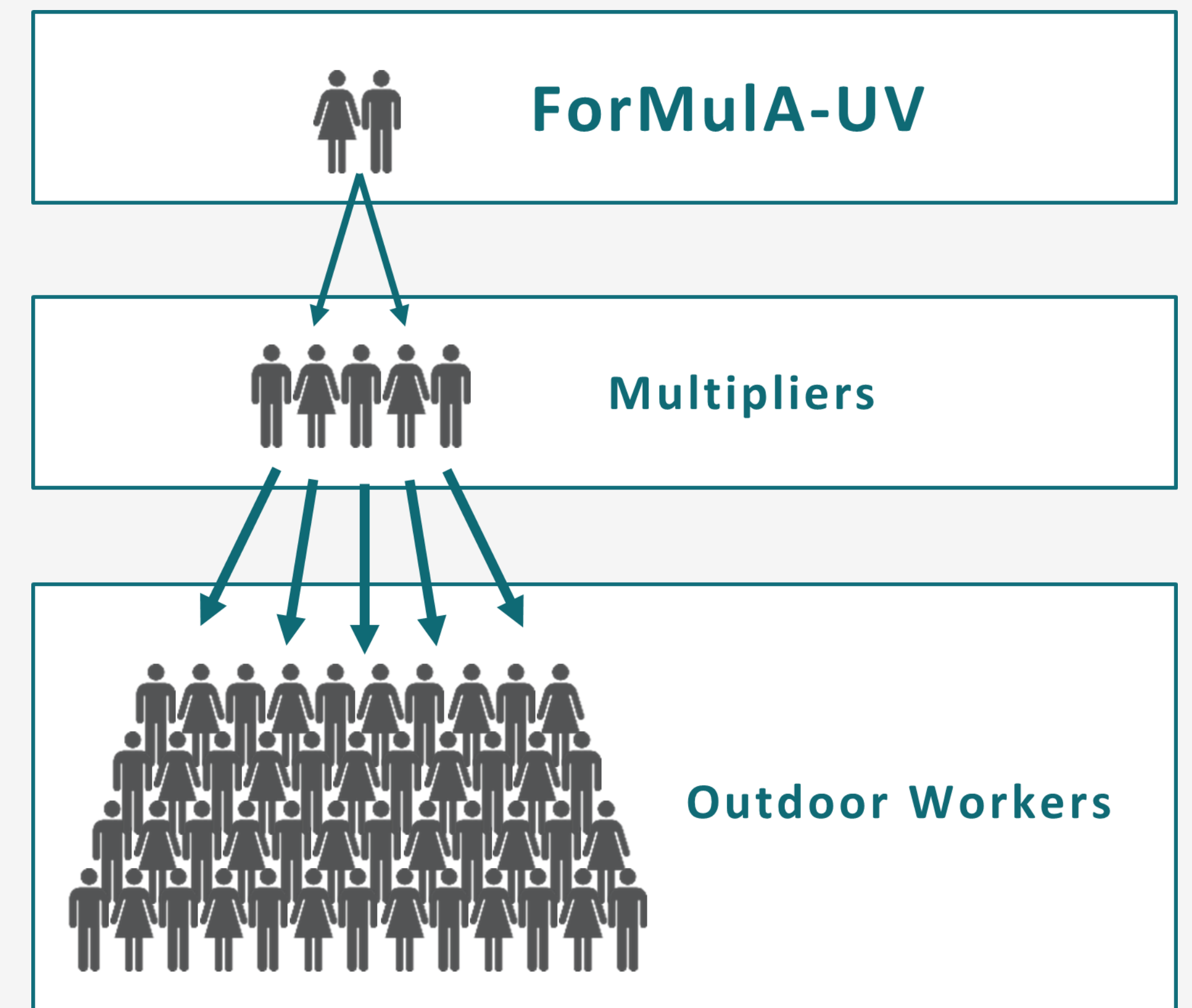


Figure 1: Multiplier effect in prevention to induce sun smart behavior.

Methods

- To systematically develop a target group specific curriculum, the relevant **literature** was reviewed in order to identify the needs of the target group and training requirements as a first step.
- To further assess practical requirements and to develop a curriculum accordingly **three focus group discussions** with three persons each (♀: 6; ♂: 3) were conducted. We involved the above named stakeholders in the discussion (occupational physicians, safety engineers, labour inspectors etc.).

Results

A **curriculum** for multipliers, which form the basis for appropriate counseling, was developed in four modules (see Table 1).

- Requirements regarding different **contents** can vary between different target groups depending on their previous knowledge.
- Educational elements (e. g. experiments on UV protection) are important **tools** for the multipliers.
- Organizational and logistical aspects (e.g. reachability) are important for the decision of multipliers whether to participate on the training.

Module	Trainer	Topics	Contents
module I	physician	medical background	<ul style="list-style-type: none"> pathogenesis clinical forms of skin cancer
module II	occupational safety and health expert	legal conditions	<ul style="list-style-type: none"> background (e. g. contractual obligations of insured persons)
module III	psychologist / health educationalist	pedagogic-psychological expertise	<ul style="list-style-type: none"> health psychological models approaches for counselling (e. g. motivational interviewing)
module IV	health educationalist	health education and prevention	<ul style="list-style-type: none"> technical, organisational and personal sun-protective measures didactical and methodical preparation of contents (e. g. experiments)

Table 1: Overview of the basic modules of the target group specific curriculum for multipliers.

Conclusions

Through the integration of multipliers and the use of target group-specific teaching curricula prevention programs can be strengthened and standardized in the future.

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Original source:

Ludewig M, Rocholl M, Heichel T, Braumann A, Skudlik C, John SM & Wilke A (2017): Konzeption einer Fortbildung für Multiplikatoren zur Prävention von Hautkrebs durch natürliche UV-Strahlung bei Beschäftigten in Außenberufen: Vorstellung ausgewählter Ergebnisse des Projektes „ForMula UV“. *Dermatologie in Beruf und Umwelt*, 65(3), 120-121.