

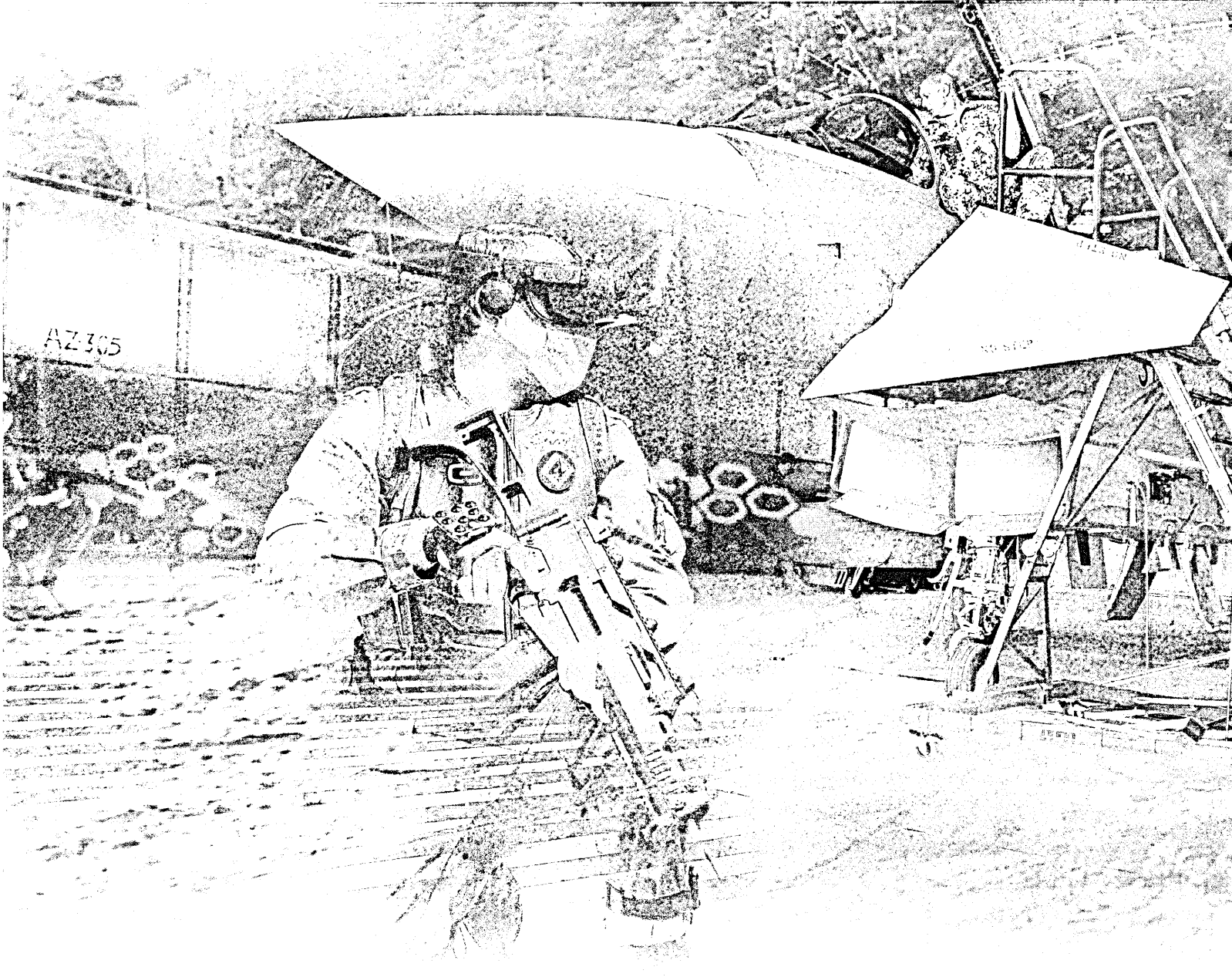


Federal Ministry  
of Defence

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# Military Scientific Research Annual Report 2021

Defence Research for the German Armed Forces



**BUNDESWEHR**

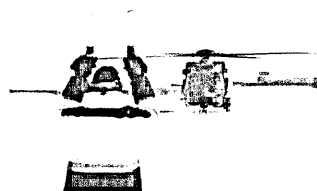


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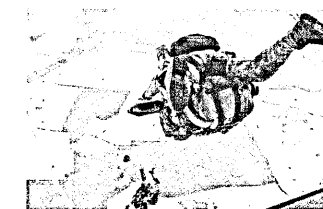
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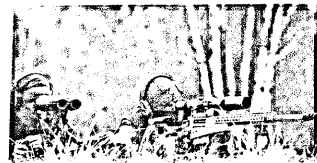
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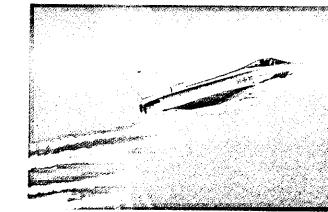
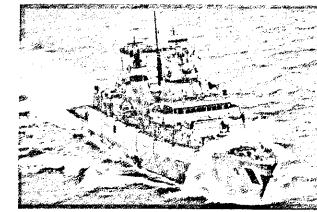


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## Postgraduate medical education and training: the research project “Evaluation, Konzeptionalisierung und Implementierung arbeitsprozess-orientierter ärztlicher Weiterbildung am BwK Hamburg (E.K.I.)”

In Germany, postgraduate medical education and residency training is ordinarily still regarded as a “by-product” that arises during patient care. The opposite is the case: As the new “Weiterbildungsordnungen” show, postgraduate medical training faces a variety of challenges that equally affect the design of postgraduate medical training programmes in clinical work settings.

Postgraduate medical training (residency) is a stage of medical education. It refers to physicians who have graduated from medical school and obtained a medical degree. Residents practice medicine in a hospital or clinic with the aim of acquiring specialist medical skills. The duration of residencies can range from three to seven years, depending upon the specialty. The specialist medical skills that need to be developed are determined by the “Weiterbildungsordnungen” of the German federal states and the respective guidelines of the medical associations. A postgraduate training takes place in everyday medical practice under the direct or indirect supervision of a senior medical clinician registered in that specialty. Currently, the focus is primarily on developing medical skills and digitalisation, which is also reflected in the new “Weiterbildungsordnungen”.

When designing postgraduate medical training programmes, senior medical clinicians primarily refer to subjective learning experiences gained during their own residency. These experiences, which have been passed down through generations of physicians, influence the teaching/learning process and are often considered part of the professional identity.

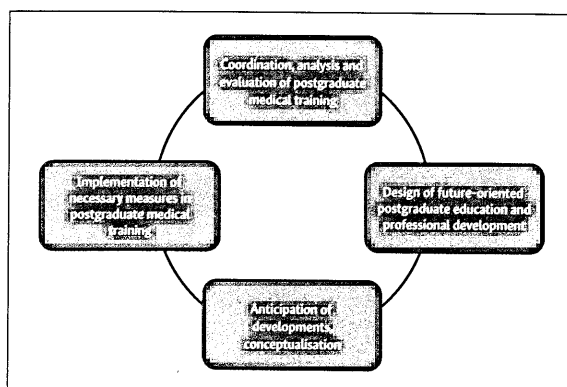


Fig. 1: Goals of E.K.I.

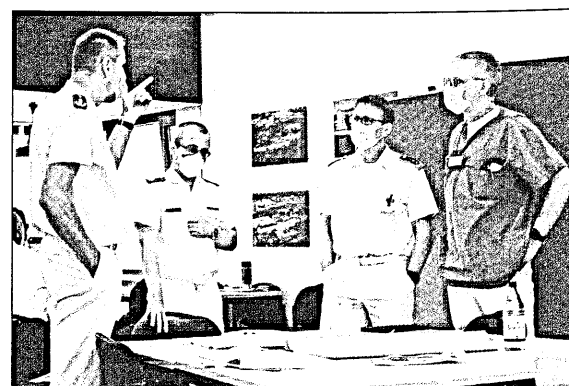


Fig. 2: Workshop participants

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The E.K.I. project (evaluation, conceptualisation, and implementation of work process oriented medical training) researches postgraduate medical education and training both in its organisational structures and in its subjective meaning for senior medical clinicians and residents. The project relates to the Bundeswehr hospital in Hamburg. Its research design focuses on process evaluation: In a first step, organisational and structural requirements and special features of existing postgraduate medical training programmes were examined and systemised. Evaluation of the collected data made it possible to derive conclusions on the current practice of medical training as viewed by the participants and the practitioners. In a second step, action options for postgraduate medical training were conceptualised. These didactic and methodical concepts are now being implemented in the hospital.

E.K.I. supports and accompanies senior medical clinicians and residents in their teaching and learning processes. The specific requirements and conditions of postgraduate medical education and training are taken into account, like differences in specialist culture, varying needs in the individual specialist disciplines or time structures.

In particular, the convergence of professional training and patient care in everyday medical practice requires a didactic-

methodical orientation and quality standards, e. g. expert knowledge, pedagogical and work-oriented skills. Thus, teaching and learning processes can be comprehended, opportunities and places of learning can be identified in the work process, and organisational structures for further training can be evaluated and established. This makes a more comprehensive look at the quality of postgraduate medical training possible. The focus is not only on technical competence. Social, methodological and reflection skills are also taken into account to support the development of a ‘umfassende berufliche Handlungs- und Gestaltungskompetenz’ (i.e. comprehensive professional performance and organisational skills) on the part of the residents.

As regards implementation, workshops were held across departmental disciplines with the senior medical clinician and residents as well as annual reflection talks with senior medical clinicians, in which adult education knowledge and assessment tools for modelling and assessing resident’s competencies were conveyed. In addition to scientific discussions on competence development, the significance of ‘Bildung’ (education) and learning for the professional identity of a physician was also an object of general debate.

- Reflection Talks
- Workshops with Trainees and Supervisors
- Exercise Book
- Polls on Current Issues
- Postgraduate Medical Training in Clinical Work Settings

Fig. 3: Conceptualisation and implementation of various trainings