Introduction

What do the special forces of the Federal Police and heart surgeons have in common? Could it be the public impression of a burst in power? The great responsibility both specialties carry and the expertise in their field. The more you think about it, the more parallels become visible. Both professions belong to the highest risk-taker groups. Fundamental for the two specialties are the necessary peak performances, both psychological and physical. Concentration, a sharp mind, well-trained, and perfect handling of every situation even under high pressure is what both aim for. To deliver these peak performances and to keep a clear head, substantial understanding of interpersonal behavior and a reflected communication are necessary. This is why a team (Prof. Dr. Torsten Doenst; PD Dr. Gloria Färber; Dr. Andreas Beckmann; Dr. Hristo Kirov; Dr. Túlio Caldonazo; Dr. Ulrich Schneider; Regina Iglauer-Sander, M.A.; Institut für Konfliktforschung und Krisenberatung Günter Weber; internal systemic coach and yoga teacher GSG9) of the German Society for Thoracic and Cardiovascular Surgery (DGTHG) under the leadership of Professor Torsten Doenst started a pilot project called “Strong German Hearts.” During this program, 14 selected residents from Germany and Switzerland were challenged to complete a differentiated structured schedule, lasting 36 hours nonstop and consisting of various psychological and different surgical assessments (►Fig. 1). Surgical handling, concentration, and scientific abilities were regularly tested, interspersed with coaching sections by highly qualified trainers of the special task forces of the Federal Police.

Report

On a Thursday evening, 14 cardiac surgery trainees got together in Berlin, not knowing what to expect. Introductions were made and expectations exchanged. Some mentioned the thrill of the unknown as the thriving factor for their application, others the idea of working through a

Keywords

► education, all levels
► surgical equipment (instruments sutures etc.)
► cardiac

Abstract

What do the special forces of the Federal Police and heart surgeons have in common? To find out, a team of the German Society for Thoracic and Cardiovascular Surgery (DGTHG) started a pilot project called “Strong German Hearts” with an intensive 36-hour training supported by the special forces of the Federal Police.
36-hour shift as past generations used to, as an aim to finish the program. Alongside the motivated trainees, there were highly qualified and eager coaches, specialized trainers from the Federal Police, and supporters from the organizing team. The journey started the next morning at 7 a.m. Each candidate received a personal file including the detailed schedule and respective tasks for the psychological and concentration evaluations, which later would be analyzed by professionals.

Since both police work and surgery are team concerns, each trainee was assigned a “buddy” for the program. Individual, but identical basic psychological and surgical assessments were conducted at hours 0, 12, 24, and 36 (~Figs. 2 and 3). Those consisted of questions regarding memorized patient data, the D-2-Test (testing tool for attention and concentration), and different suture and knotting techniques. Additionally, body temperature and a standardized mood barometer were assessed. On both days, the candidates profited from scientific advice and wrote an abstract based on provided data sets at hours 7 and 32 with their “buddy” coauthor. After a keynote lecture by the professionals of the Federal Police, our first coaching session started with the internal systemic coach for the special forces and their consultant Dr. Günter Weber, “Institut für Konfliktforschung und Krisenberatung (iKfK),” Munich. Aims of the session were on the one hand an introduction to leadership qualities, and on the other hand coaching regarding interpersonal communication and teamwork, especially in challenging situations. The honesty and openness within the small groups exceed our expectations. Our coaches created a safe environment for us to talk about issues in our daily clinical practice, address our fears in a hierarchical system, and open up about potential self-doubt or any other personal struggles.

After an exciting first day and a late night movie about the history of the Blalock-Taussig-Shunt, the best was yet to come. What happens when you are on call in your unit at midnight? There is almost for sure that one emergent surgical patient coming—and this is what we experienced during the night! Over a period of almost 6 hours, we worked on various heart valve replacements, bypass techniques, and at the very end even the infamous UFO-procedure. During these hours, the group established that indescribable atmosphere where you try to motivate your tired buddy, sit quietly next to a colleague taking a power nap, share snacks, or take a short break to breathe in fresh air. After sunrise and the third basic assessment, we greeted the day with a short meditation. The last 12 hours to come were the hardest. In our breaks people would stretch, do burpees, try to motivate each other, and we heard the phrase “come on, we can’t stop now!” a few times. Finally, at 8 p.m. sharp on Saturday and after our fourth basic assessment, we had made it. Everyone was suddenly wide awake and full of pride that we went all the way through the schedule as a team. After a toast to the program director and supporters, coaches, and colleagues, we had dinner with delightful and constructive talks about the program. Finally, there was time for a long-awaited shower and some much needed sleep. The next day, the
Fig. 2  Peer-to-peer teaching during a timed practical skills session (copyright held by Coaching + Communication/David Ausserhofer, reproduction with kind permission).

Fig. 3  Set up for all practical sessions. Each “buddy-pair” is accompanied by a mentor (copyright held by Coaching + Communication/David Ausserhofer, reproduction with kind permission).
group met for a debriefing over breakfast before departure. One month later, the group was honored during the opening ceremony of the annual meeting of the German Society for Thoracic and Cardiovascular Surgery. The individual analyses and evaluated personal files were handed out, together with a certificate of completion.

**Conclusion**

While several reports comparing surgery to aviation\(^1\)–\(^3\) exist, reporting the idea to adapt aviation-based teamwork skills to the operating room,\(^4\) there are no studies comparing the work of surgeons and special forces of the police. The "Strong German Hearts" program opens new possibilities for a new generation of cardiac surgeons. While the results of the impact of sleep deprivation on surgical handling and concentrations are an important aspect of the project (and will be published in a separate manuscript), especially implementing coaching sessions in leadership, guidance, and teamwork into a surgical training program, is a novel approach for health care executives and merits further investigation. Social behavior in the operating room is a popular study field. One study showed that the willingness to cooperate increased in a complex field such as cardiothoracic surgery, perhaps due to the complexity of procedures and therefore the necessity to rely on each other.\(^5\) It is obvious that this issue can also be applied to the special forces of the police. To emphasize this, the colleagues from the special forces pointed out that the "team spirit commitment" is not to be underrated in their field. For example, if you are the physically fittest or an excellent shooter, you will still not be considered if you cannot adapt yourself well to the team. Therefore, coaching and mentoring are an obligatory part in their work environment. While, of course, departments of cardiac surgery and special forces are not infinitely comparable, the program seems a promising concept which might be adopted in cardiac surgery or at least considered.

Particularly astonishing is the "Strong German Hearts" team spirit after the program with regular exchange of information, well-wishes, and possible get-togethers among members. The team spirit among the group might be due to the fact that we started this project to see if we could cope as individuals and finished it as a group. If asked, what we actually gained from this course as individuals, it is hard to find an objective answer. Why would one consider joining a 36-hour program while there are political discussions about reducing working hours? Why consider this program if you can rather have a weekend off? Maybe it was the feeling of success, the self-determination to finish at your own level, or the exchange among like-minded people. One thing is clear: The "Strong German Hearts" experience exceeded our expectations as trainees, and we are eager to support further meetings and trainings. To conclude in the words of Ulrich Wegener, Founder of the Federal Police Special Unit GSG9 and first commander of this special force at the liberation of the hostages on board of the "Landshut" in Mogadishu, Somalia, in 1977: "I am glad that for once we could show what we are able to do!"

**Conflict of Interest**

None declared.

**References**

1. Wood TC, Maqsood S, Sancha W, Nanavaty MA, Rajak S. Comparisons between cataract surgery and aviation. Eye (Lond) 2022;36(03):490–491