

Title:

Team Management - Can music contribute to better understanding?

Non-verbal communication in team management

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Abstract:

AIM: to train medical students to use non-verbal communication like the conductor of an orchestra.

The overall goal was to improve communication in medical teams.

METHOD: in order to explain to the students how to take control as a team leader, communicate more effectively and work well in a team, the conductor described the skills required to conduct an orchestra. He explained how to use eye contact, body language and gestures and set the students two musical exercises to perform and then gave individual feedback on their performance. These skills were then transferred to a simulated medical emergency situation in which every student was given the opportunity to play the team leader.

RESULTS: the students found the experience unexpectedly useful as it enabled them to focus on the skills required of a leader and this resulted in greater self-awareness, enhanced self-confidence and better communication.

CONCLUSION: medical students can benefit greatly from applying a conductor's skills to a medical situation: their leadership ability, degree of cooperation and professional competence are considerably enhanced



Introduction: All over the world, simulation centres are used to teach team management in medical emergency situations. Crew resource management (CRM) principles [1,2] are taught in order to explain ways of managing verbal communication with critically ill patients. It is a fact that verbal communication constitutes less than 10% of communication between humans, while 50% of communication is non verbal (body language) [3]. Students are not taught this latter form of communication at the Faculty of Medicine at the University of Copenhagen.

Conducting an orchestra is predominantly non-verbal. The conductor leads the orchestra using body language and his eyes. If his conducting reaches all the musicians in the orchestra, the magic of the music emerges..

The question is whether it is possible to apply some of the skills of a conductor to team management in an emergency medical situation in a way which makes sense for students and junior doctors.

Method: Third semester medical students (i.e. 1 and ½ years before graduation as junior doctors) participated in two non-verbal communication training days, a total of 5 hours.

On Day 1 of the course, students received a brief introduction to team management and conducting. Next they were trained in musical exercises to raise their awareness of non-verbal communication.

On Day 2 of the course, they used what they had learnt in short cardiac arrest scenarios.

Training day 1:

- A brief introduction to CRM principles and a description of a cardiac arrest case, the management of which was unclear. There followed a description of a conductor's skills and an explanation of how he manages the orchestra. The conductor introduced two musical exercises.
- Exercise 1: The aim was to teach the students to get other participants to produce a specific "sound" at the conductor's command. The conductor then gave individual feedback on authority, attitude, body language and eye contact to all the students.



- Exercise 2: A ghetto blaster exercise in which the participants were instructed to use eye contact and signs to request different soundtracks, volume or degree of involvement from the other participants. Only non-verbal communication was permitted.

Training day 2: The cardiac arrest coordinator at SimNord, Nordsjaellands Hospital, Hilleroed simulation centre participated in the day together with the authors.

- Short repetition of the learning from course day 1
- The start-up exercise from training day 1 was repeated. Direct individual feedback was given again
- A new exercise 3 was introduced. The ghetto blaster exercise from the course day 1 was repeated and then the students were trained in transferring leadership to the next student using only a non-verbal invitation.

The students alternated as team leader (anesthetist) in cardiac arrest scenarios while the rest of the students played members of the cardiac arrest team. All were given feedback on the treatment and management functions with the focus on the non-verbal communication skills of the team leader and the team.

Learning goals:

The students received individual feedback on the following points:

- Body Language:
The focus was on charisma and attitude. In summary, calm, clarity, vigour, clear communication, assertiveness and authority.



- Eye contact:

One of the main tools of non-verbal communication is eye contact. Eye contact communicates instantly and is a very powerful tool in a management situation.

- Presence:

The importance of being present at the right moment and continuously adjusting the pace to the team's reactions and relationships

- Lack of team spirit and crises:

A management situation can easily be the source of circumscribed crises caused by reluctant team players, doubt about the team leader's abilities or behaviour. The students were given tips on how to maintain the focus on the work and how to avoid doubts about the leader's authority and control of the situation.

Results:

Seven medical students attended Day 1 of the Course, 6 of whom also attended day 2 which took place 2 ½ weeks later.

At the end of the two days' training, the students were asked to provide written feedback on their positive experiences and suggestions as to how to improve the course (Table 1).

TABLE 1

Discussion:

The inspiration for the course is the assertion that the conductor's role in an orchestra is very similar to the team leader's role in a hospital room: two tense situations that require teamwork guided by a confident leader.

To examine the relevance of this assertion regarding medical doctors, a training course was organised for seven medical students.

Student 3: I think it was most instructive to try to communicate without words while learning the importance of body language.

All 7 students were clearly uncomfortable having to act as leaders in front of the rest of the class in exercise 1. The need for leadership nevertheless outweighed any reservations. One only has one shot at success with a concert even though the music is rehearsed thoroughly beforehand; cardiac arrest is an unpredictable event requiring immediate action which must also be practised on a regular basis. As one student said "vanity and personal concerns must not be allowed to interfere"

In the case of cardiac arrest, a specialised team will attend. Every team member has received instruction which clearly defines his function in the situation. The anesthetist is appointed to lead this team and has undergone training that provides him with the necessary skills for the job. He has both the right and the obligation to take responsibility for leading the team.

Student 5: A medical case was presented in order to make the exercise relevant and underlined the importance of being able to take charge and of communicating clearly in an emergency situation.

You do not need an innate talent for leadership to become a good Team Leader. Team leadership can be learnt.

Student 7: Good tips from the conductor about capturing attention and initiating an action without words. Good tips on how to assume leadership and putting on "the coat of authority"

When the conductor assumes leadership, putting on this "coat of authority", he is fully aware of the new situation and clearly indicates this change to everyone on the team. This can be done in several ways: by a change of position, attitude, voice, eye-contact or expression, or may even be marked ver-



bally by changing something as subtle as inflection. These small steps will provide the team with clarity and confidence, and the leader with authority and self-confidence; furthermore it will mark the start of the process.

Student 4: Furthermore, as well as it being interesting in itself to listen to the conductor's story and messages, it also seemed to be clinically relevant.

It is recommended that the medical team leader select a location in the room from where he has an overview of the team and can focus on management, just as the conductor directs the orchestra from the podium. This detail provides the Team with greater clarity, focus and confidence.

In a simulated cardiac arrest exercise, one of the students operated the defibrillator most convincingly. When he called out "STAND BACK" clearly and urgently, the team responded immediately and moved away from the patient's bed. The same student was then asked to act as Team Leader in another exercise, but on this occasion he gave no evidence of leadership. His body seemed to slump, his eyes were unfocused and his voice became hesitant and uncertain. Asked about this significant loss of authority and change in appearance, he explained that operating the defibrillator was a simple job that he felt comfortable with and knew exactly what he had to say. Then he pursued the statement and added that it might be a good idea to practise and rehearse a few brief phrases he could use when leading a team.

Student 1: The elements I think were particularly important were delegating responsibility and being able to rely on others to do the job. They force one to reflect on how to communicate and convey what you want to be done and to ensure that the message is received and clearly understood.

These exercises, including cardiac arrest scenarios and personal feedback, gave students a new understanding of their own body language and of the use of eye contact and made them reflect on how they would be able to use this knowledge in their future professional lives.

Conclusion:



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Using an entirely different discipline - musical exercises and learning the conductor's point of view and focus - provides a new outlook on the concept of team leadership and non-verbal communication.



References

1. Ostergaard D, Dieckmann P, Lippert A. Simulation and CRM. Best Pract Res Clin Anaesthesiol. 2011 Jun;25(2):239-49.
2. Spanager L, Østergaard D et al. Koncept og træning af sundhedsfagligt personale I crisis resource management. Ugeskr Laeger. 2013 Mar 25;175(13):880-4.
3. Mehrabian, Albert (1971). *Silent Messages* (1st ed.). Belmont, CA: Wadsworth. ISBN 0-534-00910-7.



Table 1: Feedback from participating students.

Student no.	Training day 1	Training day 2
1	<p>There is no doubt that I will definitely be able to use what I have learnt in my future work and in my life today. I think that it was incredibly rewarding and I learnt a lot about myself. The most important elements in my view were how to delegate responsibility and how to rely on others to do the job. They force one to reflect on how to communicate and how to ensure that the message you want to convey and what you want to be done are properly received and understood. At the same time one learns to manage multiple aspects. Managing + controlling body language. Not becoming preoccupied</p>	<p>It made a lot of sense to have a second or follow-up session on the different aspects and thoughts we covered on day 1. This enabled you to check whether you have learnt anything/used it but mainly it gave you the opportunity to develop it further. For me the fact that we tried it in various situations (cardiac arrest instrument/ghetto-blaster) was very positive. It made you realise that you can implement it in different situations, not only professionally but also in your private life. Great combination.</p> <p>A few examples to explain what I mean:</p> <p>The ghetto-blaster: everyone can use it, you do not feel uncertain about skills or knowledge hence you can immediately focus on the leadership aspect. The exercise makes you realise that it is easy and possible to lead and it teaches you how to do so.</p> <p>In other words: if you do not feel competent in the technical aspects of the cardiac arrest course, the ghetto-blaster course makes you aware that it is not a lack of leadership skills that stands in the way, but uncertainty about professional skills.</p>
2	<p>Good ideas and good introduction to the role of the conductor. It was good to hear about the importance of body language and the physical aspect of non-verbal communication. Then it was good to practise it during the two sessions, where you had the opportunity to be corrected and see others corrected. It was very entertaining to be a trainee and this was partly due to the great atmosphere and not least to the good teachers. It was especially interesting to learn something about a hitherto unknown but relevant profession.</p>	<p>Amazing that Ture remembered weaknesses and strengths. Inclusion of the clinical aspect was good. Again GREAT with personal feedback on body language and performance. What increased the value was clearly the personal feedback during the course. The personal feedback led in turn to tailor-made feedback from the instructors, which one can use in the rest of one's career.</p> <p>Suggestions for improvements: more variety in the scenarios, and include additional (unexpected) challenges. Allow all participants to be team leader, since we can always learn something from this role, whether we are active or passive.</p>
3	<p>I think it was most instructive to try to communicate without words and at the same time I learnt how much one's body language means. Also it was extremely interesting to see to what extent you were aware of other people's body language and learn how to read it. It was really good that you made a case for the importance of clinicians having non-verbal communication skills. - I feel there could possibly have been more clinic-based exercises.</p>	<p>Day 2 was even better than day 1. There was a very good balance between the non-verbal communication aspects and the more practical part with cardiac arrest simulation. It was excellent and I felt privileged getting so much attention.</p>
4	<p>Although I do not like dramatising a situation or using role-play in any form, I think that the focus on one's posture and non-verbal communication called for a kind of self-examination, which was rewarding. Not only were the conductor's history and messages interesting, they also seemed to be clinically relevant. If the course were to be repeated, it might be advantageous to link it to something more specific, for example to an emergency at the hospital.</p>	

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5	<p>A case was presented before the exercise and it was a good idea to underline its relevance and make the exercises appropriate. At the same time the case study stressed the need to be able to assume leadership and communicate clearly in an emergency situation. This element made me realise the relevance of the exercise. I think that the exercises did well in stressing the importance of body language and eye contact, both in day-to-day communications and in an emergency. More clinically based exercises could be added, and as mentioned in the subsequent discussion, video recordings of the trainees could be used to give them an opportunity to see for themselves how they communicate.</p>	<p>Constructive input from both Ture (conductor) and Casper (cardiac arrest coordinator), which focused on different aspects. It would work better if Ture provided input after each simulation instead of the end of the day. In addition, you could exercise one or two "normal" simulations, and then do several exercises adding various stress factors like in the last simulation. I feel I would profit more from this.</p>
6	<p>I was surprised by how the "Doctor's 7 Roles" could be implemented through the use of the "musical instruments". It was most rewarding to stand up and perform in front of colleagues and radiate authority on a subject you basically knew nothing about. It was nice to have the ability to empathise with the medical role as Leader, where you are the decision maker and lead a team. All in all, I think it was fascinating to see how the two different worlds were similar in some respects, and I was taught ways to take advantage of this in the future. Another time it might be interesting to stage a Cardiac Arrest simulation and trainees could be given the opportunity to work with the non-verbal tools.</p>	<p>There was a definite improvement compared to Day 1. We knew what was important when we were told to perform.</p> <p>What was even better than last time was the clinical relevance. We were able to put what we had learnt to the test and obtain responses afterwards. Thus, the importance of being able to radiate authority was illustrated for us. Now we must remember to make use of these new tools in the real world.</p>
7	<p>Overall, a good idea to teach medical students and doctors how - in short - to control an emergency situation.</p> <p>Good:</p> <ul style="list-style-type: none"> • good tips from the conductor on how to capture attention and initiate action without words. • Good tips on how to assume leadership and put on the "coat of authority" • good and relevant exercises 	<p>Overall, Day 2 well-structured and instructive.</p> <p>Good</p> <ul style="list-style-type: none"> • The repetition of the two musical exercises was well timed.. It was also instructive to repeat the exercises after reflecting on what we had done on Day 1. • The Cardiac arrest exercise was good, we saw how non-verbal communication was connected to a clinical situation. • The review of the cardiac arrest exercises in which the conductor described his observations

