

Brief interview with Dr. Henning Mallwitz

“Begin where it hurts the most”

Three questions to Dr. Henning Mallwitz, Director BODE SCIENCE CENTER, Director Research & Development, BODE Chemie GmbH, Hamburg, Germany

Every year, there are between 1 000 and 4 000 deaths due to infections with multi-resistant pathogens alone – there is acute need for action in German clinics. What do you think is the hygiene measures’ preventive potential for antibiotic resistances?

Dr. Henning Mallwitz: Simply put, it is necessary to develop new antibiotics and antiinfectives, respectively, use antibiotics rationally and consistently implement hygiene measures. The latter offer the advantage that they can be realised immediately and involve lower costs than the development of new drugs. And: hygiene additionally can considerably contribute to protecting all patients in the hospital against nosocomial infections (NI), independent of the pathogen. At a conservative estimate, 30 per cent of these infections can be avoided by hygiene. Studies already showed that infection rates can be reduced by as many as 90 per cent in patients with central venous catheter. Particularly hand hygiene plays a key role here. This positive effect is especially important for patients with infections due to multidrug-resistant pathogens, as most of these diseases are severe and therapy options are limited.

It is widely known that hand hygiene compliance is insufficient. Some experts doubt that it is possible to achieve a compliance rate of 100 per cent. What is acceptable from the patient’s perspective?

Dr. Henning Mallwitz: Of course, it is not acceptable that only every other required hand disinfection is carried out. However, the range of variation is large among the clinics. There are also facilities in which the rate is above 70 per cent. New study results suggest that, from the patient protection perspective, hand hygiene compliance needs to be above 80 per cent to reliably prevent the spread of infections. Example: according to an American study, from this threshold value the total NI rate decreased by 31 per cent; MRSA rates decreased by 64 per cent and the number of bloodstream infections by 66 per cent. There is a high risk of infection for patients that need to undergo an aseptic task, such as the placement of a venous or urinary catheter. Here, pathogens can enter the surrounding tissue or even the vascular system via the catheter and trigger severe infections, such as bloodstream infection. To achieve an impact as high as possible, we at the BODE SCIENCE CENTER focussed on these aseptic activities when developing a new hygiene strategy. We virtually begin where it hurts.



Simply do it – wouldn't this be the right motto for hygiene? Most of the employees know how to do it. What new approaches have you found?

Dr. Henning Mallwitz: Although the knowledge on correct hygiene often exists, this does not mean that it is actually carried out at the patient and exactly in the situations that may be critical for patient safety. We see much room for improvement at differing levels. Our approach's prime objective is to make concrete nursing activities safer for the patient. For this, we have developed standardised operating procedures (SOPs) for important nursing and medical measures that are associated with common nosocomial infections.

Hygiene has much to do with behavioural change. We know from the organisation of work that well-structured, progressive activities are easier to understand for employees. Our SOPs offer a logical sequence of all steps of a complete nursing task, integrating all moments that involve the risk of infection. In the workflow, employees better recognise the link between their action and the patient's risk of infection. First studies already show that the improvement of the workflow can increase the compliance, particularly for the hand disinfection before aseptic tasks, achieving increases in compliance from 65 per cent to 97 per cent. Also, the practical experiences gained in the pilot clinics that work with our SOPs allow us to be optimistic.

Source

"From very close – hygiene along the patient journey." Speech by Dr. Henning Mallwitz, Director BODE SCIENCE CENTER, Director Research & Development, BODE Chemie, Hamburg, Germany held at the Lunchtime Symposium "Pathogens resistant to antibiotics: new hygiene strategies along the patient journey", 17 November 2016, Berlin, arranged by the BODE SCIENCE CENTER, Hamburg, scientific centre of excellence of PAUL HARTMANN AG, Heidenheim.

