

## CORRESPONDENCE

## The Causes of Prehospital Delay in Myocardial Infarction

by Cornelia Gärtner, Linda Walz, Eva Bauernschmitt, Prof. Dr. Karl-Heinz Ladwig  
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### Well functioning lay system

The authors complain about the fact that patients with myocardial infarction alert the rescue services too late, that they ignore symptoms, and that they seek help from all the wrong parties (family, general practitioner). This complaint is ubiquitous, and, aware of how unsuccessful all efforts thus far have been, we should think about whether the problem is articulated in the right way.

Everyday, we notice physical signals; these include pain stimuli for which no clear explanation exists. We either ignore these stimuli, apply plausible explanations, or treat them with household remedies or self medication. We may talk to partners or friends, whose advice may help us cope. In this layperson's system, most health problems are successfully dealt with.

Once we have reached an age when coronary heart disease becomes common, we have applied these strategies for many years and with great success, and that includes chest pain. All ailments have disappeared, even without consulting a(n) (emergency) doctor. What the authors are complaining about is thus an extremely limited number of cases in which the functional layperson's system fails owing to misinterpretation. If we want to lower the threshold for people to seek professional help we will also do so for people who are not ill; we should think long and hard about this (the authors are familiar with the problem of somatization).

The current data do not allow the conclusion that the decision is delayed if general practitioners are consulted. This is a scenario of "confounding by indication": people choose this path especially in case of uncertainty. Since they fear calling out the emergency rescue services, and no campaign in the world will change that, a call to the general practitioner will in fact accelerate the alarm.

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### In Reply:

Professor Donner-Banzhoff is correct: Patients in the acute early stages of myocardial infarction fear calling out emergency rescue services and "no campaign in the world seems to have been able thus far to change that particular behavior." Population wide campaigns actually have resulted in measurable successes, but the effects are often disappointingly small and only short term. The

expectation that affected patients in their acutely threatening situation may realize the core symptoms of myocardial infarction seems misplaced. In order to be able to help patients in acute, life threatening crisis situations, we propose paying more attention to the psychological and emotional aspects of decision making behavior in response to the aversive acute symptoms (1). As so often, many paths lead to Rome. However, the general practitioner plays a central role in his or her structured advice to high risk patients—long before anything actually happens (which symptoms are present, what is the correct behavior, what is the emergency services' telephone number, which typical mistakes are made, and which "false" thoughts spring to mind?). This would be an important step towards a shared decision making process," which is crucial in terms of patient satisfaction and may therefore also support adequate risk avoidance behavior (2).

The suspicion that sensitizing affected patients can turn them into "cardiac anxiety neurotics" may be well founded at first glance—but for a psychoneurotic development into a somatoform disorder, the reason usually is that a patient suffers with an irresolvable conflict in his or her life's reality and not that they know the disease symptoms or some such. Studies of the cost-benefit effect of campaigns have shown that the benefits gained from the timely admission of genuinely positive coronary patients to hospital outweigh the disadvantages of false positive emergency doctor call-outs (3).

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### Conflict of interest statement

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