The role of the patient’s compliance for the wound-healing process – results of a longitudinal study

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Background

Chronic wounds represent nowadays a widespread and very cost-intensive problem. An adequate care provision of chronic wounds is therefore a big challenge for the patients themselves on the one hand and for the society as a whole, particularly against the background of an ageing society and increasing cost pressure. The necessity of reinforcing integrative care structures represents a very important task, especially in Germany as the division between the different health care sectors – particularly between the ambulatory and the stationary sector – is traditionally very high. This division may lead to meaningful efficiency losses of the related health care provision. The relevance of this issue appears even more higher if chronic wounds are regarded as a major cause of morbidity in the population (Franks 2007) and if the impact of chronic leg ulceration on the patients’ quality of life is taken into account.

Aim

Nowadays a multidisciplinary wound care provision system is often regarded as an optimal way to improve the treatment quality and – as a result – the patient’s quality of life. This can lead to economic savings in the long run. It is, however, still unknown which impact the patients’ compliance might have in this context. The main aim of our study was therefore to investigate the role of a lack of compliance on the treatment process.

Methods

Within the scope of a multidisciplinary wound care provision, data on the patients’ quality of life, medical parameters and costs were collected and analyzed at four points in time – in the beginning, after 4 weeks, after 12 weeks and after 24 weeks. Then the outcomes were compared between patients who showed a lack of compliance and patients who showed a sufficient compliance. A lack of compliance was defined by a clear and verifiable refusal of the wound care team instructions, independent from the specific reasons behind. In the following figure the underlying methodology and the main measuring instruments are shown.

![Figure 1. Overall study design](Image)

The inclusion criteria for the study was the existence of a predefined chronic wound of any etiology. Beyond that the patient’s had to be insured at the cooperating health care insurance. The period of investigation was from April 2007 to June 2008, the overall case number was N=48. The main characteristics of the study population were a high share of leg ulcer (54 %), an amount of 67 wounds (48 % > 7 cm² wound size), an age of 74 years, a share of 56 % women, and a share of 62 % of people living alone.

Results

Altogether, our data analysis revealed that the patients’ compliance plays a very important role for the whole wound healing process. For patients with a lack of compliance, the wound status showed a slight improvement in the beginning, but then changed again for the worse almost back to the initial point. The results related to the patients’ wound-specific quality of life stay in line with this (figure 3).

![Figure 2. Wound healing progress for selected patient groups – illustrated by the so called ‘Würzburger Wundscore’](Image)

![Figure 3. Wound-related quality of life – compliant versus non-compliant group](Image)

Finally, the overall treatment costs turned out to be – related to the period under observation – much more higher for patients with a lack of compliance. If the differences with regard to wound size reduction and complete wound healing would be, for longer time periods, taken into account, all effects would be expected to be even more clearly.

Discussion

Our study showed that the patients’ compliance has a high impact – similar to the effect of the general condition of the patient – on the wound healing process and as a result on the treatment costs and the patients’ quality of life. A holistic approach including further strategies to strengthen the patients’ compliance should therefore be pursued. In this context, the specific reasons behind a lack of compliance should always be considered. Only if the patients’ compliance is adequately accounted for, a sustainable wound care provision including meaningful savings can be reached, while the risk of a system breakdown is simultaneously reduced.

For literature please contact author.