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# Small stuff, deep underlying emotions: An overview of the positive effect of laughing

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#### **Article Info**

#### **Article Notes**

Received: November 18, 2021 Accepted: April 11, 2022

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#### Keywords

Humour Humor interventions Pain Cancer Palliative care Talking about painful experiences can spontaneously result in (uncomfortable) laughter. In doing so, laughing can be considered a way to control difficult feelings. At the same time, laughing can have a positive effect on patients' well-being in itself. Although humor is often accompanied with laughter, this paper specifically focuses on the positive effect of the act of laughing. We focus on laughter and how this is commonly applied in actual medical practice, including pain relief.

Approaching (shared) laughter as a way for pain to become bearable for the patient and close relatives is rather new<sup>1</sup>. It means that doctors (or other healthcare professionals) use their empathic skills<sup>2</sup> differently; e.g. instead of empathizing with their pain, they transform it into something positive by letting the patients (and often themselves) laugh. Today, medical specialists often follow an optimistic and energetic stance during their consultations to positively stimulate their patients<sup>3</sup>. This optimistic approach often includes laughing during consultations<sup>4</sup>. Although this approach is sometimes questioned, ('they are too optimistic'), a positive attitude (at the right moment and time) has been shown to impact the life of many patients positively.

At first sight, it seems simple (letting patients laugh). To a certain extent, it seems more simple than giving appropriate pain medication in patients with incurable cancer. Just as severely ill patients, we (as healthy persons) also experience relief when we laugh, even when this is initiated in an artificial way<sup>5</sup>. The expression 'laughter is the best medicine' therefore seems to have a valid basis<sup>6,7</sup>. The relaxational elements of a 'laughing body', just as the release of higher doses of endorphin, possibly increase patients' well-being.

Applying laughter as a form of pain relief goes a little further and can be approached in two different ways: The initiation of laughing during consultations<sup>3</sup> and as some form of laugh therapy outside consultations<sup>9</sup>.

## Laughing as a form of pain relief

Using laughing as a relaxational, pain-relieving technique during consultations is like making the difference between introducing 'small talk' in a serious consultation. Whereas serious conversations

can be urgently needed (such as is the case in conveying bad news), small talk may make patients and close relatives more comfortable. Previous studies have shown that this can be a challenge for doctors, e.g., finding the right moment to initiate humour/laughing<sup>3</sup>. Especially in hightech, busy environments doctors as well as patients may decline a laugh invitation. Obviously, it very much depends on the situation as to whether it feels right to laugh or not. Accordingly, if laughing is specifically regarded as a way to increase connection between doctor and patient, it should be noted that it is also fine to decline a laugh invitation; Not laughing may sometimes even increase intimacy.

In pain medicine, purposefully applying laughing can be regarded as a distraction technique to relieve pain. It is then regarded as similar to other 'interventions', aimed at increasing distractions from pain, and accordingly pain tolerance<sup>10</sup>. Such distraction techniques can be applied both during and outside consultations. They require a mindset in which at least the doctor is open to initiate laughing, and in which the patient is open to respond to such invitations. Initiating laughing requires skills from the healthcare professional, which may be transferred to other settings, e.g., during ordinary doctor-patient consultations. The atmosphere in this however seems crucial. Moreover, real-life situations always remain different, since patients themselves could also initiate laughing, either naturally or because they feel uncomfortable<sup>8</sup>.

Since every patient is unique, and not everyone wishes to be approached in a playful way, it is difficult to introduce this as a standard 'intervention' for pain relief but rather as something that happens naturally. The promising trial results on laugh therapy sessions however warrant consideration of adding them to the arsenal of psychosocial support.

# Laugh therapy

Approaching laughter as some form of therapy may be a little more artificial than purposefully initiating humor/ laughing during doctor-patient consultations. Although many papers describe the added value of laughter in medicine<sup>11</sup>, therapies in which laughter is approached as a non-pharmacologic intervention are rare<sup>12</sup>. A systematic review from Perez et al.<sup>13</sup> showed that studies in which the association between pain and humour is studied are scarce, and those available focus on an early disease stage only. They reported about humour in two different ways: as a distraction tool to increase pain tolerance and as a manner to cope with pain and the emotional distress produced by chronic pain. Tse et al.<sup>12</sup> reported about the added value of an 8-week humor therapy program among nursing home residents; a significant decrease in pain and perception of loneliness was observed, and a significant increase in happiness and life satisfaction for the experimental

group. A Japanese study among cancer patients, in which four sessions of laughter therapy were given, reported significantly better cognitive functioning and less pain than the control group; A Korean study reported similar promising results<sup>9,14</sup>. Trials on humor report on the positive effects of laughter on pain relief, and the available literature also suggests to further explore the bio-medical mechanisms (relaxational and pain relieving)<sup>15</sup>.

All-in-all, much more research needs to be done on this topic, not only with respect to laughing specifically, but regarding every emotion that easily happens in the interaction with one another, especially between doctor and patient. Breathing behavior for instance is highly influenced by the emotional state, both negative (panic, anxiety and pain) and positive (pleasure, love and relief)<sup>16</sup>. Small nuances in communication and breathing behavior (such as sighs) has been shown to have a substantial effect on patients' well-being<sup>16</sup>.

As a first step, we hopefully may soon harness the full healing potential that lies in the natural laughs during everyday doctor-patient conversations.

# **Conflict of Interest**

No conflicts of interests to declare.

### **Acknowledgment**

We thank Dr. A. Lukas and Dr. W. Terpstra for their value comments on a previous version of this manuscript.

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