
Me: @Edzard Ernst says: "Giving placebos such as reiki to cancer patients does more harm than good" (It made patients feel better, just as much as sham reiki.) "..massage has been shown to improve the wellbeing of cancer patients beyond a placebo effect. If a patient receives a massage with empathy, sympathy, time, understanding and dedication, she would benefit from the placebo effect – just like the reiki patient – but, in addition, she would also benefit from the specific effect of the treatment that massage does and Reiki does not offer."

Giving placebos such as reiki to cancer patients does more harm than good


Me: More about that recent, well-designed reiki study, from StevenNovella

Reiki Doesn’t Work Either


Facebook thread about this blogpost by Steven Novella:

BT: Eloquently argued. Must copy this and post it up at work.

JN: As skeptic of reiki I tried several different practitioners. With most I felt nothing other than the relaxation of being supine in a comfortable position for a while. However with a few I felt a strong flow of an energy I can not really describe. Subjective, I know. But could it be possible that the benefits of Reiki are not reproducible if the right practitioner is not with the right client at the right time? (3 likes)

TV: I think it was AS who said it best that the effects one authentically experiences while receiving energy work is produced by that structure between the client's ears. (5 likes)
**NO:** In other news the earth is not flat! Amazing to see these people using the same defence as the (qu)acupuncturists. Same nonsense different brand. (1 like)

**RST:** "But could it be possible that the benefits of Reiki are not reproducible if the right practitioner is not with the right client at the right time?"

Then that, if true, creates a huge problem in promising treatment benefits to clients.

And how could a client tell if they are the right client, the practitioner is the right practitioner, and the time is the right time?

If Reiki did really have an effect, but that effect was so contingent and ephemeral that all the "rights" cannot be specified, then what is the real, effective difference between such a treatment, and no treatment at all? (4 likes)

**AS:** What I do is predictable and reproducible. If I rub your skin in a certain manner, it will become warm. Depending on how easily you turn pink, it will become pink to varying degrees. This works no matter who you are, what you think about me, or what you think about the treatment. How you feel about it is subjective and whether it's what you need or not at the time is debatable, but the physiological effect of it is consistent.

If Reiki depends on the right practitioner with the right client at the right time, it is, by definition, a highly subjective experience.

No one has succeeded in producing reliable, repeatable evidence for the existence of a human energy field. However, we have plenty of evidence that humans respond to focused attention and touch.

JN, I wrote about this at length recently and invite you to read it:  

I *do* sometimes practice what might be called "energy work" but it is with the understanding that one is working with the intention of creating an emotional experience and not manipulating any HEF.


**DM:** So basically, if one reads the conclusion of this study, if we rename "Reiki" to "one-on-one support ", 'Reiki' becomes valid and powerful. A Reiki session certainly does provide a client with a very focused, sympathetic, compassionate and supportive hour or so. This is a very good thing. It's probably very rare that one will be able to receive that kind of concentrated, quiet, receptive (listening) focus and attention with other healing or medical modalities. (2 likes)
Me: Except perhaps massage, which a recent study (published in PAIN) showed to have significant effects beyond whatever it is that reiki people can provide, real or sham. (2 likes)

DM: Oh that’s great, do we have the figures from both of these research articles that give us the degree of significance of results?

Me: Here is a link to the Reiki article abstract: http://www.ncbi.nlm.nih.gov/pubmed/21531671
Here is the massage article abstract: http://www.ncbi.nlm.nih.gov/pubmed/21802850.

DM: Thank you! I’ve reviewed both abstracts and both state that the relief given, either by Reiki, sham Reiki or massage is "statistically significant". Nowhere do I find degrees of relief and significance, so I am at a loss as to how to compare and contrast the relief given by the massage versus the relief given by Reiki and sham Reiki.

Me: Reiki study: "Although Reiki therapy was statistically significant in raising the comfort and well-being of patients post-therapy, the sham Reiki placebo also was statistically significant." I.e., human contact is nice. Conclusion: "An attempt by clinic nurses to provide more designated one-to-one presence and support for patients while receiving their chemotherapy infusions could increase patient comfort and well-being."

Massage study: "Results from repeated-measures analysis of covariance demonstrated that massage resulted in a linear trend of improvements in mood and relaxation over time. More importantly, the reduction in pain with massage was both statistically and clinically significant, and the massage-related effects on relaxation were sustained for at least 16-18 hours postintervention. Furthermore, massage-related effects on sleep were associated with within-subjects effects."

DM: Yes! Great! But... based on the information given and not given by these 2 studies, it is not possible to compare the results of the relief given by the Reiki, sham Reiki and nurse’s one-to-one presence to the relief given by massage. In order to determine whether it is true or not that massage gives significant effects beyond what Reiki, sham Reiki or one-on-one nurse’s presence can would require another well-designed study to compare massage directly with one of these other modalities. (1 like)

TV: pardon me if i’m being flippant, but....there’s a difference between Reiki and sham Reiki??

Me: (Haha @TV.. apparently not. It seems that science has examined the matter and has found "no difference".)
**DM:** I’m much more concerned about comparing and contrasting the results between 2 very different studies ...and yet making a claim from that comparison and contrast.

**Me:** Why?

**DM:** How is it that you can state that massage has "significant effects beyond whatever it is that reiki people can provide, real or sham," based on the information given and not given in these two abstracts? From what we can see here, there are NO equitable objective or subjective comparisons between the two studies such as: "How much did the pain decrees on a scale of 1 to 10" or "How much did the blood pressure and heart rate change in the participants" or "ETC."

**Me:** The fact that massage's effects were lasting, improved over time, indicates that the nervous systems of the cancer patients were actually learning something about how to restore its inhibitory capacity over pain. The reiki study examined one (supposedly more effective kind of reiki - the "real") against another (faked, just contact). You’re correct that the studies were not precisely the same design, but I think the results speak for themselves, and that conclusions can, and should, be drawn. At least they were both about cancer! :) One can argue the implications are that massage or just being nice and present with patients *already* contains *any*thing that reiki, sham, *or* "real" (whatever that means) can provide, PLUS there are discernible effects past mere feel-good, measurable over time on a trend line. I.e., more cost-effective if you’re going to hire people to work on cancer patients.

**DM:** The fact that the study on Reiki/sham Reiki (one-on-one nurse contact) only studied the effects DURING treatment versus the massage research that looked at, not only the effect over time, but also the lasting effects directly after treatment....alone, makes these research studies incomparable.

**LMR:** I find this topic interesting, couldn't it possibly depend on the patients, problem areas, diagnosis, we are all individuals. Just like other modalities, some will have success for some people, while other modalities will help other persons. Or I always thought combined treatment was great. Also, helps to find what is working for the specific patient. I loved my reiki experience (1 like)

**DM:** I would find it interesting to see what the long-term effects were for the control group, Reiki and sham group in the above mentioned research.Were it studied, we may find that Reiki has an unexpected lasting effect that the sham group did not provide. Obviously, more well-designed research is begging to be executed.

**RST:** "it is not possible to compare the results of the relief given by the Reiki, sham Reiki and nurse's one-to-one presence to the relief given by massage. In order to determine whether it is true or not that massage gives significant effects beyond
what Reiki, sham Reiki or one-on-one nurse’s presence can would require another
well-designed study to compare massage directly with one of these other
modalities."

No, it works as is, because the massage study was designed to take that into
comparison. So massage demonstrated effects beyond presence in its study, and
Reiki didn’t, in its study. Since presence is comparable in the two studies, you don’t
need an additional study.

"I’m much more concerned about comparing and contrasting the results between 2
very different studies ...and yet making a claim from that comparison and contrast."

That’s fine; you can do that. There is no methodological problem there. All you are
saying is that evaluated by the criteria of its study, which factored presence in,
massage showed a significant effect, and evaluated by the criteria of its study, Reiki
failed to show an effect beyond the effect that presence would have had anyway.

DM: The study on Reiki did not even look into or consider the effect beyond the
effect of the immediate presence.

RST: So if it had no effect at that time, where would the long-lasting effect come
from?

DM: It did have effect at that time, as did the sham Reiki. (1 like)

RST: The presence had an effect. The Reiki had no effect beyond presence of a
caring person.

DM: Indeed the effect of the Reiki was immediate and it appeared to be equated to
the same effect (for the variables that were measured in this particular research) as
the presence of a one-on-one nurse for the duration of the actual treatment. How do
we know there isn’t a latent, longer term effect and/or different effect that has not
been measured in a well-designed research project that looks at lingering or long-
term effect or that looks at other variables, measures other things? For instance,
maybe the positive effects of "presence" alone do not linger or accumulate. Perhaps
those of a Reiki session do.

RST: "Indeed the effect was immediate and it appeared to be equated to the same
effect (for the variables that were measured in this particular researcha) as the
presence of a one-on-one nurse for the duration of the actual treatment."

Yes, that’s exactly it. The presence of the nurse was sufficient to account for the
effect. There was no immediate detectable significant effect due to the Reiki.

"How do we know there isn't a latent, longer term effect and/or different effect that
has not been measured in a well-designed research project that looks at lingering or
long-term effect? For instance, maybe the positive effects of "presence" alone do not linger or accumulate. Perhaps that of a Reiki session does."

How would you measure that? How would you separate any "not immediately occurring but somehow arising later" effects from other effects in that person’s life?

And would it matter? Would Reiki practitioners stop promising immediate effects to their clients, or would they ignore that research and continue to promise immediate effects?

Is the possibility that Reiki is going to have some kind of subtle effect that somehow doesn’t show up in a study yet has some kind of lingering effects worth the time, trouble, and expense to try to design such a complex study? And if that study showed negative results for Reiki, would practitioners accept or ignore that evidence?

**DM:** How were lingering and cumulative effects measured in the massage research discussed in this thread? There WERE immediate effects by both the Reiki and the sham Reiki. BOTH are valid. Let’s see. The massage study discussed above, is being noted as viable and valid. Why not execute another study identical to it, but add 2 additional treatment groups, ie. Reiki and sham Reiki?

**RST:** "There WERE immediate effects by both the Reiki and the sham Reiki. BOTH are valid."

This is the crux of the misunderstanding here.

If the sham Reiki is equally valid to the Reiki, then that means that presence is equally valid to Reiki, which means that Reiki adds absolutely nothing in the way of effect.

That’s why there’s no point in going further with it. You have to have a reason to expect that it will show an effect. And Reiki did not provide that reason to expect it in this study.

Once you have an effect, then it makes sense to examine whether the effect is lingering or cumulative or not. But that question doesn't make sense when there is no effect.

And Reiki showed no effect, because if Reiki is no different from sham Reiki and is no different from presence, then Reiki makes no difference at all.

**DM:** The Reiki and the sham Reiki had the same SHORT-TERM effect, ie. both created the experience of change in comfort and well-being during their infusion session. According to the information given in this abstract, physiological changes were not measured, pain levels were not measured, accumulative effects were not
It is a very limited study with a very limited sample and with limited variables. I find it unscientific to denounce the possible validity of Reiki based on this study alone. I also find it invalid to claim that Reiki is ineffective. There are a lot of unanswered questions that I find regarding this study and therefore, any analysis thereof. For instance, were any of the nurses, although not "performing” Reiki, actually Reiki trained (it wouldn’t be uncommon)? Lastly, the only way that you could claim that the Reiki group were not effected is to have the results be the same as the "standard care" group’s results...you remember, the group that received neither Reiki nor sham Reiki. But the case is that: the Reiki group ALSO experienced STATISTICALLY SIGNIFICANT changes in comfort and well-being their infusion and post-treatment.

Knowing that Reiki and one-on-one presence of a nurse had statistically significant effects, is it not now of interest to see which of these two groups has lasting and/or cumulative effects?

*during* their infusion and post-Tx

**TM:** well...i know one thing: one-on-one presence doesn't require paying someone thousands of dollars to attune you. sham Reiki = redundant

**RST:** "The Reiki and the sham Reiki had the same SHORT-TERM effect, ie. both created the experience of change in comfort and well-being during their infusion session."

This fact should be a major red flag for any advocate of Reiki. The fact that Reiki and not-Reiki had the same effect is a very bad sign for Reiki advocates. It means that Reiki made no difference in this study.

"According to the information given in this abstract, physiological changes were not measured, pain levels were not measured, accumulative effects were not measured, etc."

If Reiki did not provide the patients with any rise in self-reported comfort and well-being above and beyond what the presence of the nurses already provided, why would you expect physiological changes, pain levels, and so forth to be favorably affected without registering with the patients?

"I find it unscientific to denounce the possible validity of Reiki based on this study alone. I also find it invalid to claim that Reiki is ineffective."

It’s not just this one study. There is a whole body of evidence that backs it up. In studies that do not have major methodological or design flaws, Reiki consistently fails to show significant effects that the presence of a caring person would not sufficiently account for.
"But the case is that: the Reiki group ALSO experienced STATISTICALLY SIGNIFICANT changes in comfort and well-being their infusion and post-treatment.

Knowing that Reiki and one-on-one presence of a nurse had statistically significant effects, is it not now of interest to see which of these two groups has lasting and/or cumulative effects?"

But we already know that presence is important. We are social apes. This is not a new finding, and Reiki added nothing to it.

@TV, precisely. If i had an aged and ill parent to look out for, and I wanted the therapeutic benefits of presence for my parent, for the same, what, $65 I could get an hour of a Reiki practitioner at, I could get a full workday of a nursing assistant.

DM: I could eat a Big Mac, french fries and coke for lunch and my buddy could eat a salad with avocado, hard-boiled egg, pickled beets and lemon juice. Immediately, we both feel full and satisfied. Will we both feel the same in an hour or so? How about tomorrow? What if the 2 of us continued to eat in this manner for a period of 2 weeks? Will the results be cumulative? Positive for both of us? ...just because we both satisfied our hunger at lunch with a substantial amount of food that immediately made us experience a statistically significant change in our comfort levels and well-being, does not mean that the two meals are equal in value. One meal will continue to build the body. The other might actually tax the body.

"It's not just this one study. There is a whole body of evidence that backs it up. In studies that do not have major methodological or design flaws, Reiki consistently fails to show significant effects that the presence of a caring person would not sufficiently account for."

RST, do you have links to these other studies?

RST: I do, and will organize and post them later--I have appointments now, but will get back to you.

I am willing to do the work when I get back, but let me ask you a question as well--what kind of evidence might convince you that Reiki is ineffective?

Is there any evidence at all that would meet that criterion that you would accept?

DM: http://www.ncbi.nlm.nih.gov/pubmed/17109583 This would be interesting if same results could be acquired by just the one-on-one presence of a nurse. (1 like)

RST: Are you comparing the nursing assistant’s presence to a Big Mac? I’m not sure I understand what you’re getting at with your analogy.
DM: YES. It could be a possible comparison, if in fact Reiki were to show lingering and positive cumulative effects and the nurse's presence failed to do the same.

...or visa versa.

Although a small sample, this study yielded different results than the Reiki study discussed thus far in this thread: http://www.ncbi.nlm.nih.gov/pubmed/15674004 (1 like)

Although a very tiny sample, this study is interesting because it is executed with rats and the results show statistically significant differences between the effects made by the Reiki practitioners and the Sham Reiki persons.


To address your concern about cost: Reiki can be practiced by the self or a friend or a family member for no cost. Also, many Reiki practitioners work on acquaintances and strangers for no cost. In NE Ohio there are many Reiki circles that treat others and each other at no cost. The first 2 classes for learning Reiki are extremely affordable and some charge nothing for the first class, which is all you need to learn in order to begin practicing Reiki. Bashing Reiki in general does not seem like a truly academic action.

Additionally, many nurses are already trained in Reiki; so in such a case, another Reiki practitioner would not need to be present or "hired" ....maybe DOUBLE BONUS!

RST: "Bashing Reiki in general does not seem like a truly academic action."

If following the evidence where it leads feels like "bashing" to you, then I suspect that there is no amount of negative evidence that will convince you to let go of your hypothesis.

Which means that you are practicing something very different from science. Science means that you follow the evidence where it leads, and if you have to let go of a hypothesis, well, that's disappointing, but that's what it is.

There is a very different term for starting with a conclusion, rejecting all evidence that does not support that conclusion, and looking only for evidence that supports that conclusion. That practice is termed "apologetics", and it's centuries old.

But it's not science. And a calm and civil professional discussion of the difference between science and apologetics is not "bashing". (1 like)

DM: ...this is my point exactly. Thank you, RST for reiterating it.
If a costly nurse is only effective as a friend or family member that can freely apply Reiki... why would you want Reiki to be discarded?

... and we still do not know which has positive or negative lasting or cumulative effects: Reiki trained or non-Reiki trained presence. My hypothesis would be that you would find both for both groups. But one cannot make a decision about such without the WELL-designed study. I posted a couple of studies above that do show resulting differences from the two groups. I can post more of the same, as well as more to reinforce the conclusion that there is no difference between the two groups for IMMEDIATE results. This being the case, we truly cannot draw a solid conclusion either way. Obviously there are other variables that have not yet been identified; otherwise, there wouldn't be so many contradictory results between the different research studies that have already been done and published.

**RST:** I can't get this one until tomorrow, because it's behind a paywall, so I'll have to wait until I'm on campus, but just from the abstract, I see a couple of problems with it already.


1) Let's say the experiment worked exactly as you describe. Even if there are no methodological or research design flaws at all, to go from lowering BP in only 3 male individuals of a highly-refined strain of rats to "supports its use as a stress-reducer in humans" is a tremendous leap of faith.

2) "However, use of humans in such studies has the disadvantage that experimental interpretations are encumbered by the variable of belief or skepticism regarding Reiki." If the investigators are seriously arguing that it doesn't work unless you believe it works, then how can you make therapeutic promises about it to clients drawn from the general population?

3) What was the sham Reiki procedure, and how closely did it mirror the Reiki procedure? I can't tell from the abstract, but to assume that animals don't respond to human presence, whether positively or negatively, is to underestimate animals' capacity for emotion and intelligence. I'd be curious to see how they ensured that the sham Reiki procedure exactly mirrored the Reiki on the aspect of presence.

4) "For the last 5 days, the rats received 15 minutes of Reiki immediately before the noise and during the noise period. The experiment was repeated on the same animals but using sham Reiki." I will be curious when I get the paper to see what steps they took to avoid habituation effects, effects that could make the sham Reiki look less effective than it really is. (I like)

"If a costly nurse is only effective as a friend or family member that can freely apply Reiki... why would you want Reiki to be discarded?"
Well, just for one reason, the animal study you referred to claimed that "use of humans in such studies has the disadvantage that experimental interpretations are encumbered by the variable of belief or skepticism regarding Reiki."

Healthcare professionals have absolutely no business telling clients what they *must* believe in order to receive effective care.

**DM:** They don't, but some believe that prayer works in the same manner. Maybe it does, maybe it's bigger than that. It doesn't matter. What does matter is, sometimes it works.

...regardless of the beliefs of the recipients.....and yes, even regardless of the beliefs of the prayer warrior.

**RST:** We don't have any business requiring belief in prayer any more than in any other kind of faith in healthcare.

**DM:** exactly ...but we have faith in our doctors and our nurses.

**RST:** I don't have faith in doctors and nurses. I trust doctors and nurses, and if they don't earn my trust, they lose it. (2 likes)

What you posted was not a primary research paper; it was a favorable review of the research. Which is fine, as long as we are clear on what it is, and what it does and does not do.

But the write-up does reveal a significant weakness of the study that the reviewer totally missed.

Once again, the sham Reiki consisted of exactly the same hand motions as the Reiki, and showed the same effectiveness. No treatment was given in the 3rd noise room.

The Reiki and the sham Reiki showed an effect; the no treatment didn't. Once again, presence versus non-presence.

Reading that review, my interpretation is that 16 rats got sacrificed for nothing, because the researchers don't understand the concept of controlling for presence. And if they think animals don't have emotions or intelligence enough to respond to human presence, they don't know the animals they're working with.

**DM:** However, that study did reveal that, additionally, "both for leak number and area, the values for noise plus Reiki, were significantly less than those for noise plus sham Reiki; and this was repeated in all experimental runs. [Thus] Application of Reiki to rats that were stressed by noise significantly reduced microvascular leakage."
"both for leak number and area, the values for noise plus Reiki, were significantly less than those for noise plus sham Reiki; and this was repeated in all experimental runs."

Those particular values may well be true. However, since they didn't control properly for presence, then they failed to connect the dots, and for that reason, the conclusion:

"[Thus] Application of Reiki to rats that were stressed by noise significantly reduced microvascular leakage."

is fatally flawed.

Until they properly distinguish between Reiki and presence, they are going to continue to get nowhere either with following the evidence, or with trying to use research to prove Reiki. (I like)

**DM:** How would you control for presence in this study?

**RST:** Have someone present with the rats in the no treatment group in a way that the rats were comfortable with, yet did not look like Reiki--perhaps talking to the rats, perhaps not; the rat experts would have to describe the best parameters for the rats. It would have to be clearly present-yet-not-performing-anything-like-Reiki-or-sham-Reiki to be meaningful at all.

**DM:** I just noticed that I did not have permission to post the link above, so I am reposting the last study from a different site:


**RST:** "I just noticed that I did not have permission to post the link above"

You don't need anyone's permission to post a link. If they don't want the public viewing it, they don't have to post it on the Web, or they can put it behind a paywall.

About that last link you just posted, when the researchers *themselves* say in the abstract:

"Whether or not these effects are caused by Reiki itself, or the relaxing effect of the Reiki practitioner..."

I'm sure you can see the problem with drawing any conclusions that support Reiki itself at all from the study, when even the researchers admit they can't tell the difference between Reiki and presence.

**Me:** RST, perhaps I could persuade you to read and comment on this thread: [https://www.facebook.com/permalink.php?story_fbid=172564506162058&id=114879238784&notif_t=share_comment](https://www.facebook.com/permalink.php?story_fbid=172564506162058&id=114879238784&notif_t=share_comment). A reader there has been having a hard time with the other post, Edzard Ernst's blogpost about the same study. Would appreciate your opinion on this.
DM: Hahaha, To state "whether or not these effects are caused by Reiki itself, or the relaxing effect of the Reiki practitioner..." is to imply that the sham Reiki people had the opposite of a relaxing effect!!! What?!!! I find the conclusions of some research papers ridiculous.

RST: But that's a direct quote from the conclusions of the paper you yourself posted directly above:


"Abstract:

CONCLUSIONS:

Application of Reiki significantly reduces noise-induced microvascular leakage in an animal model. Whether or not these effects are caused by Reiki itself, or the relaxing effect of the Reiki practitioner, this procedure could be useful for minimizing effects of environmental stress on research animals and hospital patients."

I don't understand why you posted a citation whose conclusions you find ridiculous. (I like)

DM: Exactly. I don't look at the conclusions. I try to focus on the data.

RST: But the data is rubbish, because the study is methodologically flawed.

That's because they didn't separate Reiki from personal interaction.

Not only did they fail to separate the two, they explicitly named their study "Personal interaction with a Reiki practitioner decreases noise-induced microvascular damage in an animal model."

But they failed to test the effect that personal interaction alone had with the rats.

That's a fatal flaw with the study, so the data coming out of that methodological flaw is rubbish.

DM: Yes. In my opinion, design flaws ...and...irrational conclusions... are some of the biggest issues we deal with in medical research. superb research design is tricky, at best. I have yet to review research that I consider flawless.

RST: You don't have to be flawless; what you have to be is good enough.
And the studies that support Reiki are all deeply flawed in ways like we're discussing. That's why we're still waiting for any evidence for Reiki.

Studies like the one you're citing don't deliver that.

**DM:** So, you would liked to have seen a 5th group added to this project: person who talks to the rats. I would then review that study and say "wait! ...still flawed....need person in room who is not talking, because there is usually no talking during a Reiki session." ....and we could go on and on and on.

**RST:** “So, you would liked to have seen a 5th group added to this project: person who talks to the rats. I would then review that study and say "wait! ...still flawed....need person in room who is not talking, because there is usually no talking during a Reiki session."

Once again, you miss my point.

"we could go on and on and on."

I think we are reaching agreement that this discussion is getting absolutely nowhere.

If you want to put your faith in deeply-flawed Reiki studies, you don't need my approval to do so, so there is not point in continuing to discuss it.

**DM:** The beginning of this post:

"More about that recent, well-designed reiki study, from StevenNovella"


Ravensara, based on our more current discussions on this post, what makes this study (the one that started this post) a "well-designed" study? 
...and so we have come full circle... =-)

**Me:** And some are still stuck behind the looking glass. (2 likes)

**RST:** For anyone who doesn't see exactly why I am bored, and leaving this discussion with Darlene, here's why:

Earlier, she asked "How would you control for presence in this study?"

I answered, "Have someone present with the rats in the no treatment group in a way that the rats were comfortable with, yet did not look like Reiki--perhaps talking to the rats, perhaps not; the rat experts would have to describe the best parameters for the rats. It would have to be clearly present-yet-not-performing-anything-like-Reiki-or-sham-Reiki
to be meaningful at all."

Asked and answered, in other words.

Now she's choosing to misrepresent what I said, and depict it as a cheap semantic game:

"So, you would liked to have seen a 5th group added to this project: person who talks to the rats. I would then review that study and say "wait! ...still flawed....need person in room who is not talking, because there is usually no talking during a Reiki session." ....and we could go on and on and on."

Anyone can look further up in the comment stream, and see what I really said, as opposed to how she put words in my mouth.

This is boring and pointless, so I'll let Darlene have any last words she likes--I'm out.

DM: The same design flaw exists in the study that began this post. Simple, but true.

For the record, RST, I had no intention of misrepresenting you. I was choosing one scenrio in order to make reading my point easier. This, apparently was an error, on my part, because you felt I took you out of context, and for that I am sorry.

Perhaps, so this misunderstanding did not occur, I should have just written: ..a 5th group where "...someone [is] present ... in a way that the rats were comfortable with, yet did not look like Reiki--perhaps talking to the rats, perhaps not; the rat experts would have to describe the best parameters for the rats. It would have to be clearly present-yet-not-performing-anything-like-Reiki-or-sham-Reiki to be meaningful at all."

Anyway it is written, the point remains the same. Each and every one of us can always find design flaws and find ways to improve the design of a research project....and yet, sometimes, (most likely because we're human...and most often unconsciously), we will overlook serious design flaws, variables unaccounted for, in the research we present to others in order to support our personal views and beliefs. Design flaws in research occur because humans are in the driver's seat and humans are not flawless.

What I feel is important, is when each of us realizes that we may have missed a mark somewhere, that we admit it. Only then will, both, the analysis and the quality of research improve.

RST: That was a gracious apology, Darlene, and I accept.

I take your word for it that you didn't mean to represent me. But I still do feel that this is pointless, and we are talking past each other.
I quit talking to you because I thought you were trying to play some kind of "gotcha" game with lots of false equivalencies. If you are not playing a game, then we need to examine closer why this is proceeding in this way.

I think perhaps the crux of the matter is that you feel that a flaw in research that doesn't support Reiki counts as a point in favor of Reiki, when that's not how it works.

If everything were equal and perfectly symmetrical, then it would count that way.

But science is asymmetric, weighted against false positives at the expense of false negatives, so Reiki still has to prove itself. And the studies that purport to demonstrate an effect of Reiki don't do that, because they confound Reiki with known effects of presence. And that's the heart of the matter.

**DM:** What I feel is that study on Reiki needs the additional variables to be considered and lingering and long term effects considered as well in order to differentiate clearly between Reiki and sham Reiki. I truly feel it is jumping the gun to dismiss Reiki without looking at what a treatment does for you tomorrow or the next day compared to the other groups, ie. sham, presence and control. Many treatment modalities in medicine do not have immediate effects. How can we be so sure that Reiki is not one of these without putting it to the test?

I also feel, although you can be sure that I am excited that there is a study that is considered well-designed that proves the efficacy of self-reported increased comfort and increases sense of well-being for cancer patients, I am concerned that, in this thread, massage was considered "better than" Reiki or sham Reiki, because we have NO comparable values between the two studies. I truly feel in order to make a clear and concise conclusion regarding such, another study, like this one involving massage and cancer pain, that includes Reiki, would have to be conducted.

I also think it is prudent to be aware of the fact that the Reiki study discussed which started this thread, also lacks the variable of just "presence" alone. Should it be re-conducted and the 5th group added, then perhaps we would have a better understanding of what illicits "immediate" relief in cancer patients undergoing chemotherapy.

**RST:** "How can we be so sure that Reiki is not one of these without putting it to the test?"

But that's a philosophical question. The corresponding scientific questions are "Has Reiki yet proven that it has immediate effects? Has Reiki yet proven that it has longer-term effects, despite the fact that it hasn't shown itself to have immediate effects?"

The answer to both is "no". If that ever changes, then researchers will re-examine
the question again. But until Reiki shows itself effective, and that has to be not in studies with major methodological flaws, but reasonably rigorous ones, there is no reason to advocate for adding Reiki to standard treatment.

And in a perfect world, we could give all therapies an infinite number of chances to prove themselves. But in a system of limited resources, at some point you have to say, ok, this therapy has had enough chances and nothing solid has come out of it; it's time to pursue more promising lines of research.

The asymmetry may feel unfair, but it's because of the situation we find ourselves in. If you think of the American justice system, you may remember that there is a saying "Better for 10 guilty people to go free than for 1 innocent person to go to jail."

Because of that principle, American defendants are presumed innocent, and the prosecution's job is to prove them guilty.

In other countries, such as France, where the Napoleonic Code operates, the defendant is presumed guilty, and it is not the prosecution's job to prove them guilty; it is the defendant's job to prove themselves innocent.

For that reason, doubtless, there are innocent people who are hapless and unlucky enough not to be able to prove their innocence, and who end up jailed for crimes they didn't commit.

If we had perfect knowledge, we would jail only the guilty, and release only the innocent. But in this material world, no one has perfect knowledge, so we do the best we can in the meantime, and we commit to risk in one direction or the other.

In the American system, we commit to letting 10 guilty people go free *cough*0]cough* in order to avoid the risk of sending even 1 innocent person to jail. In France, they value things differently. But in either case, there is a commitment to either false positives or false negatives, because we can't have perfect knowledge to make decisions.

Same with science. We can either risk lots of false positives, and accept every hypothesis that comes along until the "prosecution" disproves it, or we can say that the hypothesis must "prove" its own correctness before we accept it.

Science has chosen to go with the latter, because we feel it's safer to go with centuries of accumulated knowledge. New hypotheses and treatments have opportunities to prove themselves. Sometimes things get missed, but studies get repeated over and over, and most of the time, the right answer eventually comes out.

Reiki's had that opportunity over and over, and it doesn't deliver the results. It may feel unfair that the side that doesn't accept Reiki doesn't have to do the work of
disproving it, and that Reiki has to prove itself, but that's why it's not symmetrical. Reiki has the "burden of proof" on it, and until or unless it delivers on that proof, it's not going to be accepted.

Massage, on the other hand, has delivered on that burden of proof--not for every single claim ever made of it, of course, but consistently enough on enough fronts, that it has met the burden of proof for certain claims.

And Ernst is arguing that Reiki has not met the burden of proof enough times, that the probability of it being a fruitful area to continue exploring is very low--not zero, but very, very low--so much so that he recommends against using resources for it.

That's why it's not a symmetrical situation. I get the impression from some of your arguments that you think it is symmetrical--that every point on against the Reiki study mentioned works as a point for Reiki, but that's not how it works. Reiki has to do its own job to meet the burden of proof, and the studies cited pro-Reiki are so flawed that they don't meet it.

THE OTHER THREAD:
Giving placebos such as reiki to cancer patients does more harm than good

Me: @Edzard Ernst says: "Giving placebos such as reiki to cancer patients does more harm than good" (It made patients feel better, just as much as sham reiki.) "...massage has been shown to improve the wellbeing of cancer patients beyond a placebo effect. If a patient receives a massage with empathy, sympathy, time, understanding and dedication, she would benefit from the placebo effect – just like the reiki patient – but, in addition, she would also benefit from the specific effect of the treatment that massage does and Reiki does not offer."

AI: this is such a poorly conducted test and the title is misleading. it says reiki does "more harm" when the study shows the opposite, that indeed it did good to the patient. also, what is sham reiki? i am no reiki expert and from what i understand there is not a lot of training needed to "channel energy" to another person.

Me: ..A lot of expensive training to convince you it's even possible and to turn off your inner logic. The point being made by Ernst is that it is preposterous to provide reiki, in that it is a sham (whether it's intended as "sham" or supposedly "real", i.e., based on invalid (unverifiable) "energy" belief system, with both having same outcome): Therefore reiki is without "actual" benefit, unlike massage, which, although a lot of placebo response does accrue to it, and although the mechanism may still be a bit vague, *has* proven itself to be better than placebo. Not only preposterous but unethical and antiscientific. (2 likes)
CBZ: Yes, the idea that we should merely lie to a patient to get them to respond.

AS2: JH, you might be interested in this.

MPE: this study is flawed from the beginning....humans don't make or control Reiki, Reiki does the work, so if someone is there even pretending..then quatum mechanics tells us that it's possible. now i don't even believe in Reiki or practice it, but you gotta admit...people FELT better and that's the point. Reiki doesn't have to REPLACE anything. IT’S COMPLEMENTARY PEOPLE!! let the patients feel good! (2 likes) even pharmaceuticals are subject to PLACEBO EFFECT 50% OF THE TIME! (1 like)

JH: Yeah - this happens every once in a while. The "science" community loves to bash Reiki because they can't figure it out. Every time a cancer patient gets up off of my table with a smile and hugs, I know I've brought just a little bit more peace to the world. I will continue to do so. ;-) (2 likes)

KHS: the title of this article is dishonest, the author is less concerned with the wellbeing of oncology patients and more with a smug display of how clever he feels he is. The nurses involved in this study actually work with cancer patients and want best possible outcomes for them - their opinions in this are to be respected. Your credibility as a group is diminished when linking to such things

Me: Please realize this link will not imply any lack of credibility. It will point, rather, to a lack of credulity.

KHS: "Please do not imply any lack of credibility. Point rather to a lack of incredulity." re: your comment above - posted then retracted. If you feel talk of credibilites is inappropriate, perhaps we could discuss integrities.

The study referred to in the article clearly demonstrated benefit for oncology patients that received both reiki and placebo reiki above those that received neither yet the title of the article clearly states that giving placebos such as reiki does more harm than good. Nowhere in the study can i see mention of this. Would you care to comment on the integrity of whoever decided upon that title? Further, would you care to comment on the integrity of The Guardian for publishing the article under that title?

The author of the article states that simply administering a placebo like reiki would deprive patients of “the specific treatment effect”, and “therefore rob patients of the benefits they need and deserve”. And uses this to support his argument that desperately ill cancer patients should avoid such treatments. Can you point to anywhere in the study that it suggests reiki should be a lone treatment of choice or even substituted for any treatment recommended for use in the oncology wards? If this cannot be found in the study – would you care to comment on the integrity of the author for stating this in support of his ‘opinion’?
Me: Not retracted, typo corrected.
I think his point is that stripping "treatment" of all *but* the placebo effect is a big waste of everyone's time. I would agree, in that it is inherent in pretty much any sort of hands-on provided by human primate social groomers of any persuasion. I liked that he referenced the study in PAIN done re: massage for cancer patients, that it showed benefits extended beyond placebo.

KHS: this seems to have disappeared? i notice my last post to your Guardian / Edzard Ernst article link has disappeared -twice. A FaceBook glitch no doubt – so i’m reposting it. Just in case it gets disappeared again i’m posting to your wall. I’ll restate my concerns here. Ernst acknowledges that the study found cancer patients undergoing chemo (which Ernst also acknowledges can have some awful consequences) and who had Reiki and faux Reiki - derived benefit from it. But the Ernst suggests that receiving Reiki is detrimental to the patients wellbeing because receiving Reiki will mean they will miss out on other more preferable treatments. On these same grounds the author also suggests oncology teams should not make Reiki available to their patients. This is a remarkably spurious suggestion from Ernst since nowhere in the study can i see it suggested that Reiki should replace any treatment option in use in the oncology wards. Ernst proudly proclaims himself scientist and that science is the reason cancer patients undergoing chemo should be denied an option that one study has shown them to benefit from. It seems to me that Ernst is so wedded to his dogma that he has lost the ability to be impartial in his ‘science’, so wedded to his self image as a champion of sceptics that he is willing to see cancer patients suffer more that they need to. By anybody’s definition this has to be bad ‘science’. In my opinion it also calls into question the Ernst’s integrity and i wonder why you would link the article and defend the him? I wonder why you disappeared my past posting (now restored) and wonder why you’ve failed to address my concerns as stated in my first posting? Have you really so little confidence in your position on this? (1 like)

Me: KHS, I have no idea what you're on about. No posts were removed except for one of my own, which contained a typo, and was reposted, corrected. Facebook often disappears things without warning.
About your opinion of Ernst, I can only assume you don't like the article because it/Ernst conflicts with your own particular bias. I post whatever I find interesting. Have a nice day.

KHS (several consecutive posts): another of my posts that disappeared, this one lasting only a few minutes - FB is certianly being a punish of late. No matter, her it is again ... (1 like)
remarkable - only the bottom part (original bit) of th post disappeare this time. FB is certainly contrary this past few days. Perhaps 3rd time lucky? wow, tha one lastd 2 seconds ... i am impressed, but i suspect FB has nothing to do wth this and the owner of this page is censoring dissenting views? Surely a proud sceptic would not be afriad of having dissenting opinions posted on his (her?) wall? LOL 0 that one lasted
less than 1 second ... are you so afraid of opposing views when you are so fearless at
attacking those you do not like? 6th time fortunate perhaps. But if you are sooo
afraid of havng dissenting opinions - would it not be easier to ban me from this page
rather than constantly disappearing my posts. I say this in all sincerity cos this
constant censorship from one so proudly championing 'science' - it's making you
look just a tad ...
something? that one lasted perhaps seconds ...
@KHS, I have no idea what you're on about. No posts were removed except for one
of my own, which contained a typo, and was reposted, corrected. Facebook often
disappears things without warning.
come now, that really is a tad disengenious is it not, shouldn't a proud sceptic hae
the courage fo their convictions and at last be honest about disappearing posts the
don't like?
jeez, the srtess of being censored so effectively has turned me not an awful typo
queen
:-(
how about 1 last attempt for both of us ...
hmmm? damn you are quick i surrender

Me: I think the problem is that Facebook can't keep up with you. And your
insistence that I am censoring you makes you seem paranoid.

KHS: well, perhaps you're right, so i've given FB a bit of a rest from my postings. And if
it seems to you i am paranoid, well - from my end i'd have to - perhaps this is another
thing you may be right in, Though even you wouldn have to admit, having my post
disappeared (sometimes only in part) 7 or so times does look a tad suspicious? So how
about once more, and if it disappears this time - i'll message it to you, and you could post
it for me - we could see if FB treats you as c
avalierly? Juts a thought
(laughing))

well no, actually – the reason i dislike the article is that Ernst has been given a glimpse of
a mechanism that helps relieve some of the suffering of cancer patients undergoing
chemo and yet on behalf of ‘science’ he has sanctimoniously chosen to urge oncology
units worldwide not to pursue this. It’s contempt for such behaviour that has me disliking
this article, not any bias. And as for having a nice day, all i can really say is – unlike
Ernst, the niceness of my day is not predicated upon the anticipation of unnecessary
sufferings of people living with cancer and undergoing chemotherapy – perhaps you
would care to share with facebook how you feel about this last?

Me: Actually, I was *very* pleased to see the recent study in PAIN which demonstrated
that massage helped reduce cancer pain. A good study; so, good for patients AND good
for a science-based whittling away of human suffering. It wasn't just attention that
equated to placebo, there were effects that measured as better-than, which is why things
are studied for all possible effectiveness.

To insist that reiki is better than placebo is to fly in the face of science's capacity to
measure/determine/establish effects greater than chance or placebo. One of the main
reasons to study any intervention. Are you mad because the study found that reiki did absolutely nothing but charm and impress slightly? And that no matter how hard you study it or how much $ you spend to learn what to "think about" while working, it's all for nothing? That doing "fake" reiki is every bit as useful? Which is to say, it's not useful at all?

KHS: re: your comment ...

"Are you mad because the study found that reiki did absolutely nothing but charm and impress slightly? And that no matter how hard you study it or how much $ you spend to learn what to "think about" while working, it's all for nothing? That doing "fake" reiki is every bit as useful? Which is to say, it's not useful at all?"

to be honest, i thought the study referred to in Edzard Ernst's article indicated that both Reiki and sham Reiki were of demonstrable benefit to cancer patients undergoing chemotherapy? Edzard Ernst wrote ...

“The results of this study were impressive: reiki did, in fact, make the patients fell better. Specifically, it increased the comfort and wellbeing of the patients in comparison with those who received no such intervention. Intriguingly, however, the sham reiki had exactly the same effects, and there were no differences between real and sham reiki.” Or have i misunderstood Edzard Ernst?

Re: the recent Pain study, i have no disagreement with you in acknowledging the validity if this study, nor the value of oncology massage. But i can only see Edzard Ernst’s mention of this as a deliberate red herring, an irrelevancy introduced by him to justify and distract. If we remove it from our considerations we’re left with …

1) a study involving 200 cancer patients undergoing chemotherapy in a chemotherapy infusion centre showed those having both reiki and sham reiki during treatment derived benefit to their wellbeing from it whilst those having neither did not derive that benefit.
2) in the Guardian article about that study, Edzard Ernst felt that it was appropriate for a person of his standing in medicine and science to ‘insist’ to oncology teams throughout the world that they should NOT offer the option of Reiki to their cancer patients, despite his acknowledgement that Reiki sessions “... clearly help desperately ill cancer patients”

And it’s this that has me angry with the article and disgusted with Edzard Ernst. We’re talking about people who have cancer. People isolated in their fears and pains and sicknesses. People who know that a substantial percentage of them will die far sooner than later, and that for many – their deaths will not be pleasant. People that Edzard Ernst wishes to deny access to a treatment he acknowledges will probably make them feel better, simply because of his ideology.

Allow me to ask you a question. Do you not think it should be the cancer patients undergoing chemo who should have the right to decide if they access Reiki during their treatments - and perhaps derive the observed reduction in suffering it seems
to offer? And not some callous individual hiding behind a facade of science that knows nothing of those specific people, their fears and their sufferings? A simple question at the heart of the matter ... (2 likes)

**Me:** KHS, Perhaps some of your questions will be satisfied by reading Steven Novella's expanded take, and the many many comments that follow, particularly those by RST, on this thread: [https://www.facebook.com/permalink.php?story_fbid=213874662011418&id=114879238784&notif_t=share_comment](https://www.facebook.com/permalink.php?story_fbid=213874662011418&id=114879238784&notif_t=share_comment).

**RST:** Hi, KST,
"to be honest, i thought the study referred to in Edzard Ernst’s article indicated that both Reiki and sham Reiki were of demonstrable benefit to cancer patients undergoing chemotherapy?"

Yes, and that's exactly the problem. If Reiki and not-Reiki have comparable effects, then Reiki is not adding anything to the process.

And we understand why not-Reiki works. We're social apes, and we do better under another person's caring attention.

If not-Reiki works because of caring attention, and if Reiki works comparably to non-Reiki, then Reiki is simply riding on the effects of caring attention, and is not adding anything specific to the treatment effect.

"Edzard Ernst wrote ...
“The results of this study were impressive: reiki did, in fact, make the patients fell better. Specifically, it increased the comfort and wellbeing of the patients in comparison with those who received no such intervention. Intriguingly, however, the sham reiki had exactly the same effects, and there were no differences between real and sham reiki.” Or have i misunderstood Edzard Ernst?"

Yes, you misunderstood the significance of the sentence that started with "Intriguingly". The fact that non-Reiki works about as well as Reiki is a huge problem for Reiki advocates.

"Re: the recent Pain study, i have no disagreement with you in acknowledging the validity if this study, nor the value of oncology massage. But i can only see Edzard Ernst’s mention of this as a deliberate red herring, an irrelevancy introduced by him to justify and distract."

You are making serious allegations about Ernst's motives. How is it that you claim to know what his interior world is?

"If we remove it from our considerations we’re left with ..."
This is a critical decision point about how you want to proceed. If you want to practice science, then you follow all of the evidence, wherever it leads. Sometimes we have to let go of hypotheses we've fallen in love with, and that sucks. But if you want to practice science, that's how it works.

Or you can practice a different field altogether, one which is called "apologetics". In apologetics, you make up your mind in advance what conclusion you want to find, and then you cherry-pick the evidence to support it, and you discard the evidence that doesn't support it. That's what you are doing when you deliberately remove evidence from your considerations in an attempt to strengthen your argument.

You can practice science and be taken seriously by critical thinkers, or you can practice apologetics, and be taken seriously only by other apologists.

But it's impossible to do both, and the choice of how you proceed is up to you.

"1) a study involving 200 cancer patients undergoing chemotherapy in a chemotherapy infusion centre showed those having both reiki and sham reiki during treatment derived benefit to their wellbeing from it"

Here we get at the crux of the problem again. Reiki needed to perform significantly better than not-Reiki to demonstrate that it had a treatment effect *above and beyond caring attention*.

It failed to demonstrate that.

"2) in the Guardian article about that study, Edzard Ernst felt that it was appropriate for a person of his standing in medicine and science to ‘insist’ to oncology teams throughout the world that they should NOT offer the option of Reiki to their cancer patients, despite his acknowledgement that Reiki sessions “... clearly help desperately ill cancer patients”"

You misunderstand Ernst again. Caring attention clearly helps desperately ill cancer patients, and Reiki does not add anything more to that.

And if, as Ernst does, you want to practice science, rather than apologetics, then he has a duty to follow the evidence wherever it leads, and to share that evidence and information with the larger community.

"And it’s this that has me angry with the article and disgusted with Edzard Ernst"

Nobody is denying your right to having and expressing your feelings, although I think your disgust is misplaced.

"We’re talking about people who have cancer. People isolated in their fears and pains and sicknesses. People who know that a substantial percentage of them will die far sooner than later, and that for many – their deaths will not be pleasant."
Those of us who are clinicians or cancer survivors--or, like me and many other critical thinkers, are both--are well aware of how vitally important this discussion is.

"People that Edzard Ernst wishes to deny access to a treatment he acknowledges will probably make them feel better, simply because of his ideology."

You're entitled to your feelings of anger and disgust, but you don't get a free pass on misrepresenting Ernst, just because of those feelings.

"Allow me to ask you a question. Do you not think it should be the cancer patients undergoing chemo who should have the right to decide if they access Reiki during their treatments"

If that decision is made freely and with fully-informed consent in response to a practitioner who is honest about what Reiki can and cannot do, without over-promising results, then yes.

"- and perhaps derive the observed reduction in suffering it seems to offer?"

"It" here is caring attention, not Reiki, and there are others ways of obtaining caring attention that don't require submission to belief in the supernatural.

"And not some callous individual hiding behind a facade of science that knows nothing of those specific people, their fears and their sufferings?"

You are using a rhetorical trick and binary thinking to demonize Ernst and other critical thinkers, rather than sticking to the facts of the matter.

The real worlds of clinical practice and cancer survivorship are not as black-and-white as you paint them here

**CAM**: There ain't no reiki.

**MD**: But what if the people who were doing sham-Reiki had accidentally discovered a new Reiki modality? That would explain why they *both* worked, wouldn't it? (1 like)

**RST**: "There ain't no reiki."

Dog help me, I'm quoting Bill Clinton: "That depends on what your meaning of 'is' is." But I'm an ontologist; whatcha gonna do?

Certainly, there is a set of mutually-agreed upon cultural rituals that bear the term Reiki; in that sense, to say "there ain't no Reiki" is as absurd as to say "there ain't no tea ceremony" or "there ain't no Stations of the Cross". All you need is one group of
people practicing either ritual to disprove your statement.

What you mean, correctly, and what I think most people miss when you say it, is that while there does exist such a set of rituals, there is no connection between that set of rituals and empirical reality in the natural world. (2 likes)

**Me:** RST, I thank you for your lengthy and patient deconstruction of this whole topic, and especially for having arrived to this thread, in which plenty of confusion reigns in certain quarters. I can't imagine anyone having been more adept at blowing off clouds of confusion and cognitive dissonance. (1 like)

**RST:** My pleasure :). (1 like)

**KHS:** I’m about to bolt out the door and will be away from home for 3 days so am unable give these posts the consideration they deserve