# Spirituality and Health

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I would like to tell you a story.
It's about my wife who was diagnosed with a colon cancer in 1986.
Took up running;
set an example - I took up running too.
Changed her life in other ways: enrolled U. Of Montreal to get a diploma in Community Nursing, in French, with a severe hearing impairment caused by childhood measles. She was required to take a course in Statistics, and she passed with flying colours, even though mathematics had always been something she was convinced she was no good at, and avoided assiduously.
One thing she was not good at: as a nurse, she had always looked after others, and she had a lot of difficulty allowing others to look after her. Even during her last hospitalisation, she would not allow me to spend as much time with her as I wanted; she insisted that our children and my patients needed me more than she did. A part of me realised that she was looking after me and after our kids, but I was unhappy that I could not do more to look after her.
After several weeks, she slipped into a coma, her skin jaundiced from metastases in her liver. I set up a roster of friends who would come and keep her company during the hours when I had to be away. They were so grateful for the opportunity to help.
Even though we knew she was dying, her actual passing was an unexpected shock. The church was packed for her funeral, with people who had been touched by her and her capacity to look after others.
Several years later, my father died of stomach cancer. He chose to die at home, with the support of a doctor who made house calls and the Victorian Order of Nurses who visited daily. I arranged for time off work during his last days so I could go and stay with my parents in Brampton, Ontario and provide basic nursing care to my dad. I was happy and grateful to have the opportunity to return the love and caring he had given to me and my brothers and sisters.

Over the past eight years or so, I was seeing cancer patients in the Oncology Clinic at the Jewish General Hospital. Usually they would be referred for depression, anxiety, fatigue, or sleeping problems associated with their cancer.

After dealing with the practical, biological issues, there were often existential concerns these patients wanted to talk about. Some patients I would tell about my wife who had died, or my experiences nursing my dad. Why?

- Crisis gives birth to opportunity
- Setting an example is much more powerful than telling people what to do
- We have an obligation to allow others to help us



Learning that you have a serious life-threatening illness such as cancer is clearly a crisis in your life. But many cancer patients use this crisis as an opportunity to make significant changes in their lives, changes for the better. Because when there is a crisis, it means that something has to change. Whether that change is for the better or for the worse, is up to us. And that is why a crisis is an opportunity.

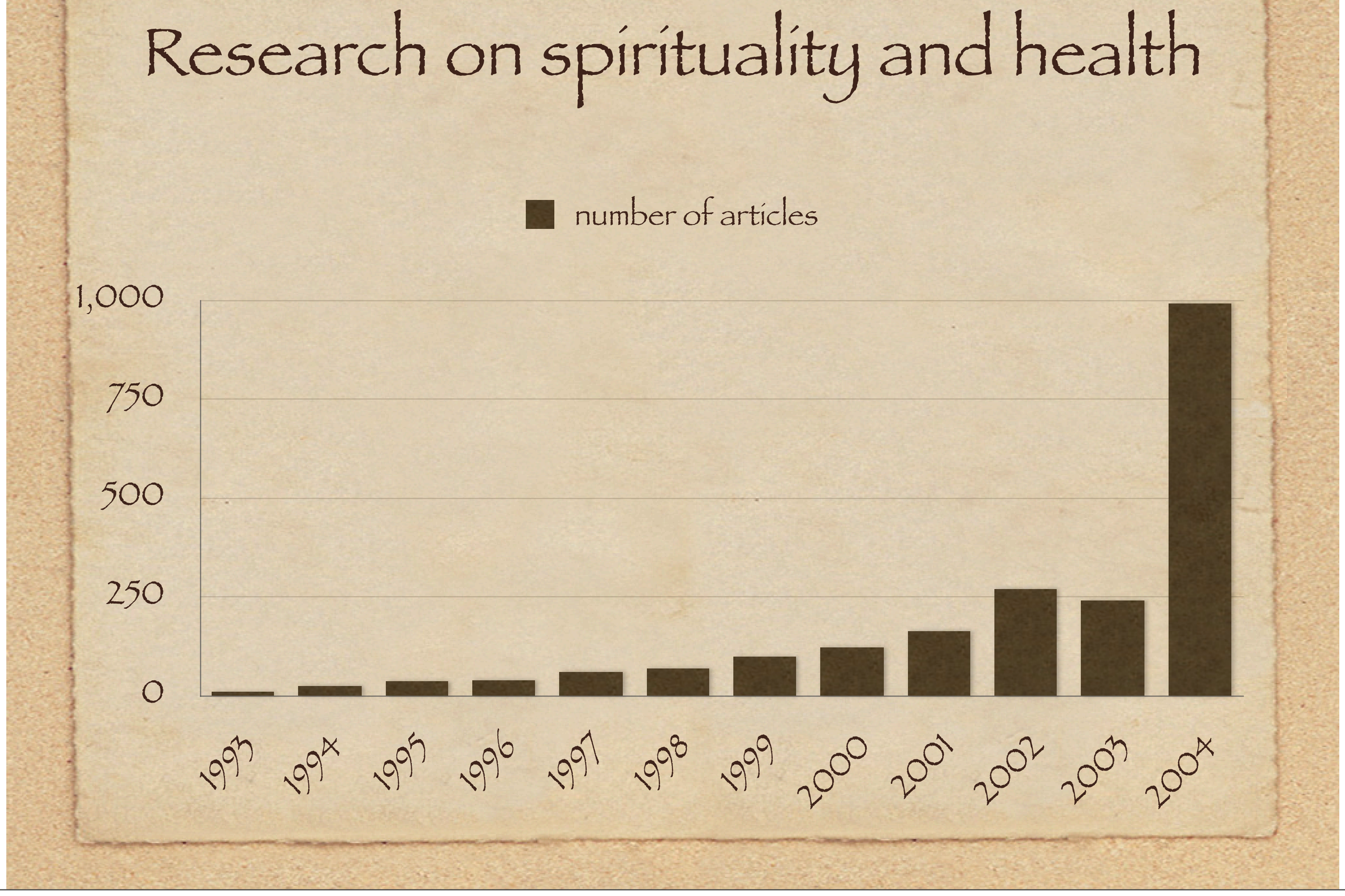
❤

I may also tell patients that they have a responsibility, as parents, to demonstrate by their example to their children, that we can always make changes to improve our lives.

❤

Finally, for those individuals who feel bad because their illness prevents them from helping others in the way that they're used to, I ask if the person has difficulty accepting help from others. If yes, I explore their reasons for helping others. Invariably an important motivator is that the person feels good when he or she is able to do something for someone else. I gently point out that if they do not allow others to help them, they in effect are denying those people the opportunity to feel good. The patient's illness provides him or her with the opportunity and responsibility to contribute to the wellbeing of others by allowing them to help him or her in their time of need. This is a serious responsibility, and difficult to do well.

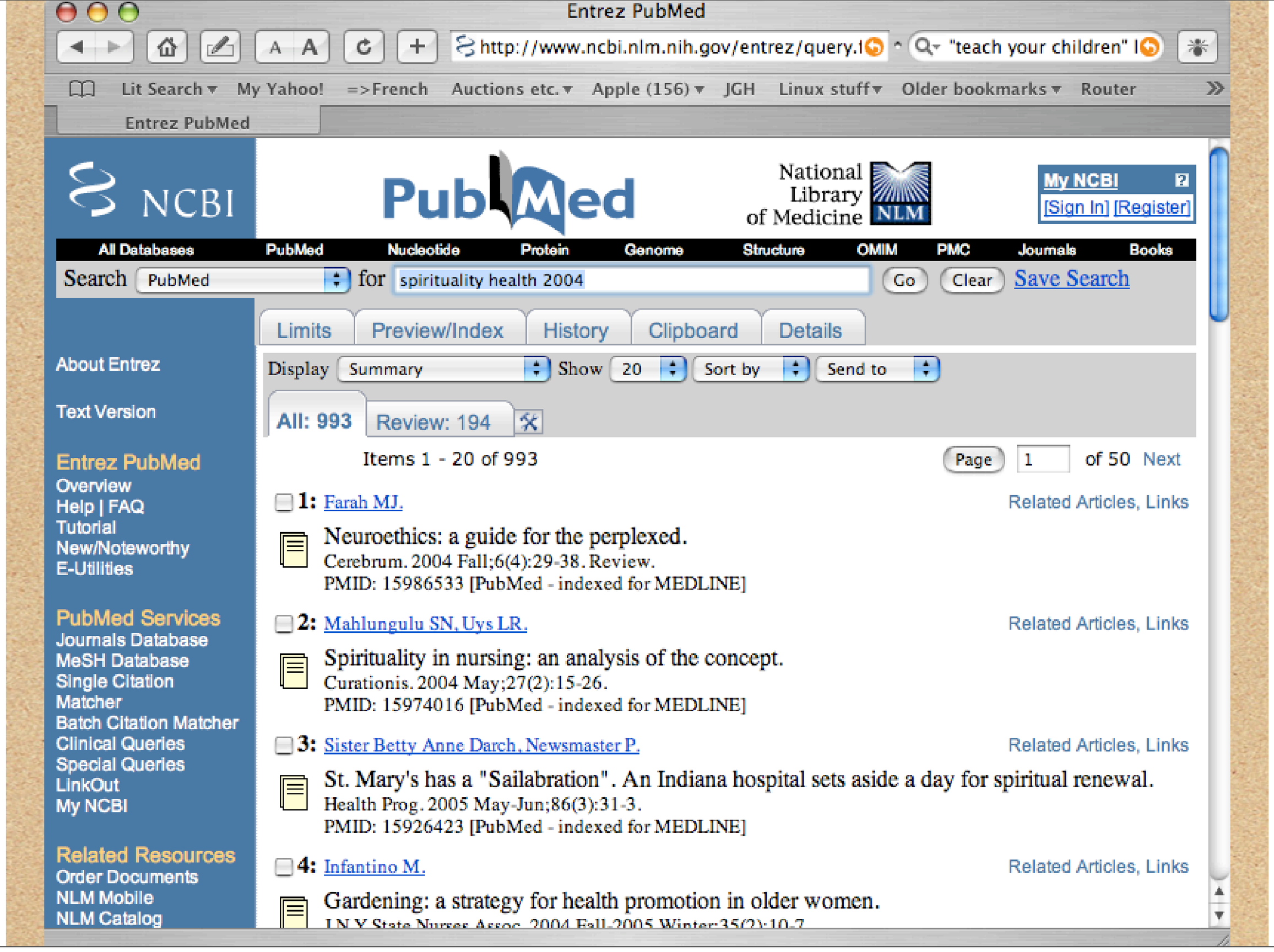
I will come back to these points later on.






Spirituality and health is a really hot topic these days.

This chart shows the number of research articles published each year from 1993 to 2004, based on a search using PubMed, the National Library of Medicine database, with the search terms “spirituality”, “health”, and the year.






This is a screen shot of the PubMed web page, showing the search terms, and the number of items found.

# Why research spirituality & health?

- 2001 "Patients' Charter" (Department of Health, Britain): NHS staff will be sensitive to, and respect, a person's religious, spiritual and cultural needs at all times.



Why research this topic? Sometimes it has to do with government requirements. For example, in Britain, the 2001 Patients Charter mandated health care providers to be sensitive to and to respect the religious and spiritual needs of patients.





Another reason is that this idea has really gotten into the public consciousness in the western world. It's such a hot topic that there is even a bimonthly magazine devoted to it.

# Spirituality & health in the Bible

- "A merry heart does like good medicine, but a downcast spirit dries up the bones" (Proverbs 17:22)
- "A man's spirit sustains him in sickness" (Proverbs 18:14)
- "A cheerful look brings joy to the heart, and good news gives health to the bones" (Proverbs 15:30)



What better place to start a search on spirituality and health than the Bible?
Here are three old testament references.

- "Do not abandon *yourself* to sorrow. Do not torment *yourself* with brooding. Gladness of heart is life to a person. Joy is what gives someone length of days... Jealousy and anger shorten *your* days and worry brings premature age" (Sirach 30:21-25)

# & in the Koran

- "And when I am sick, then He restores me to health" (The Poets, 26.80)
- "Then eat of all the fruits and walk in the ways of your Lord submissively. There comes forth from within it a beverage of many colours, in which there is healing for men" (The Bee, 16.69)

# Folk wisdom

- The heart that loves is always young (Greek proverb)
- A heart in love with beauty never grows old (Turkish proverb)

# What is spirituality?

- there is no over-arching, inclusive description of spirituality that fits all - or even a majority of - patients or clients
- spirituality is an elastic, subjective description about a person & about the way they express their humanity:
  - may have to do with values; the transcendent; personal growth; prayer

Bash A (2004) J Clin Nurs 13:11-6



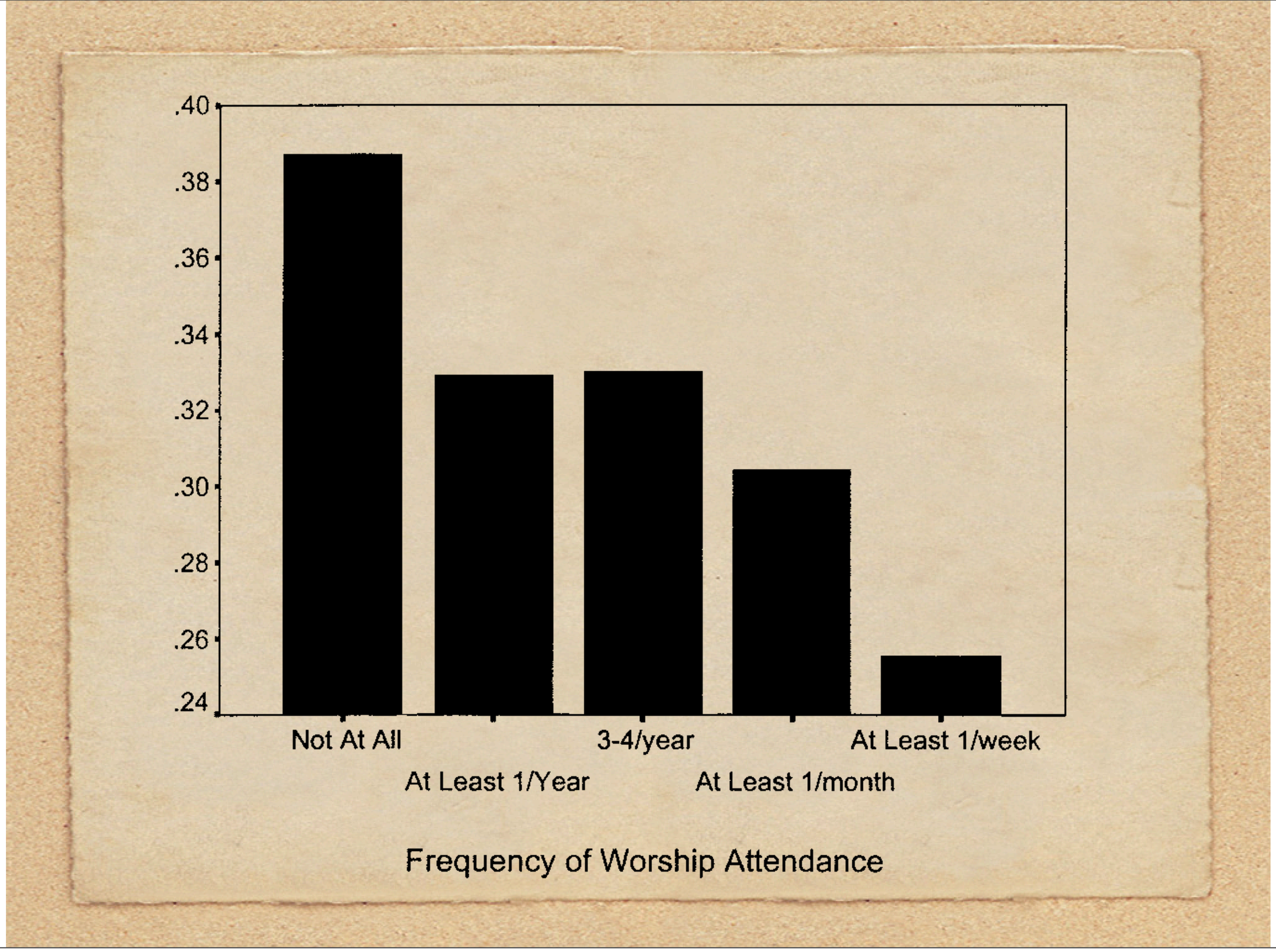
What is spirituality? This slide shows one way that medical research approaches this question. What impressed me was the fluidity of the definition - spirituality means whatever the individual wants it to mean. I was reminded of Humpty Dumpty in the book “Through the Looking-Glass and What Alice Found There”. “When I use a word,” Humpty Dumpty said in a rather scornful tone, “it means just what I choose it to mean -- neither more nor less.”

# Canadian study: spirituality and religious involvement and depressive symptoms

- National Population Health Survey
  1996-7: 70,884 respondents aged > 15 yrs
  - Baetz et al (2004), J Nerv Ment Dis 192:818-22



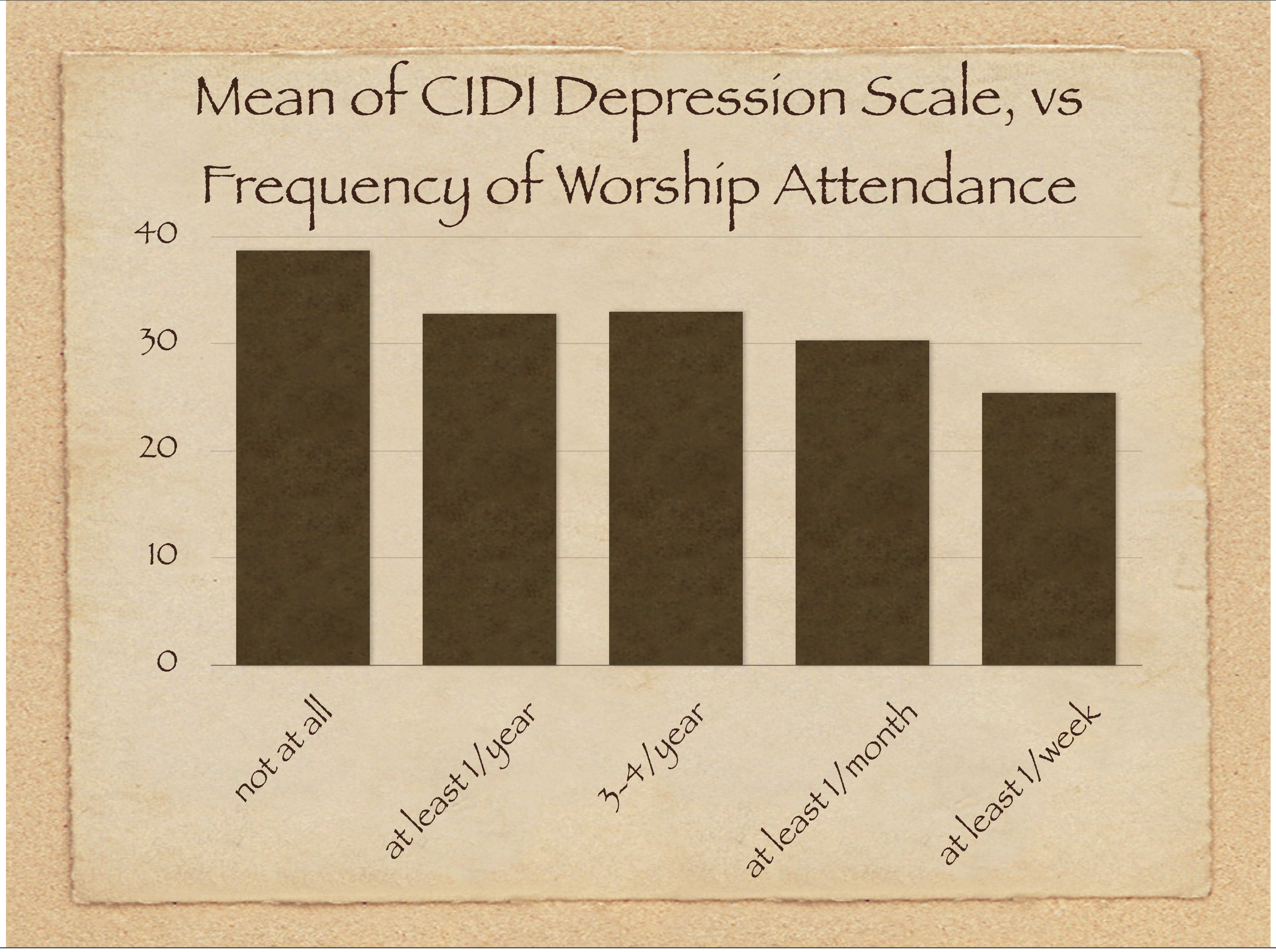
I want to look at just a little bit of the voluminous research on health and spirituality. Here is a Canadian study published last year in a prestigious psychiatric journal, the “Journal of Nervous and Mental Disease”.





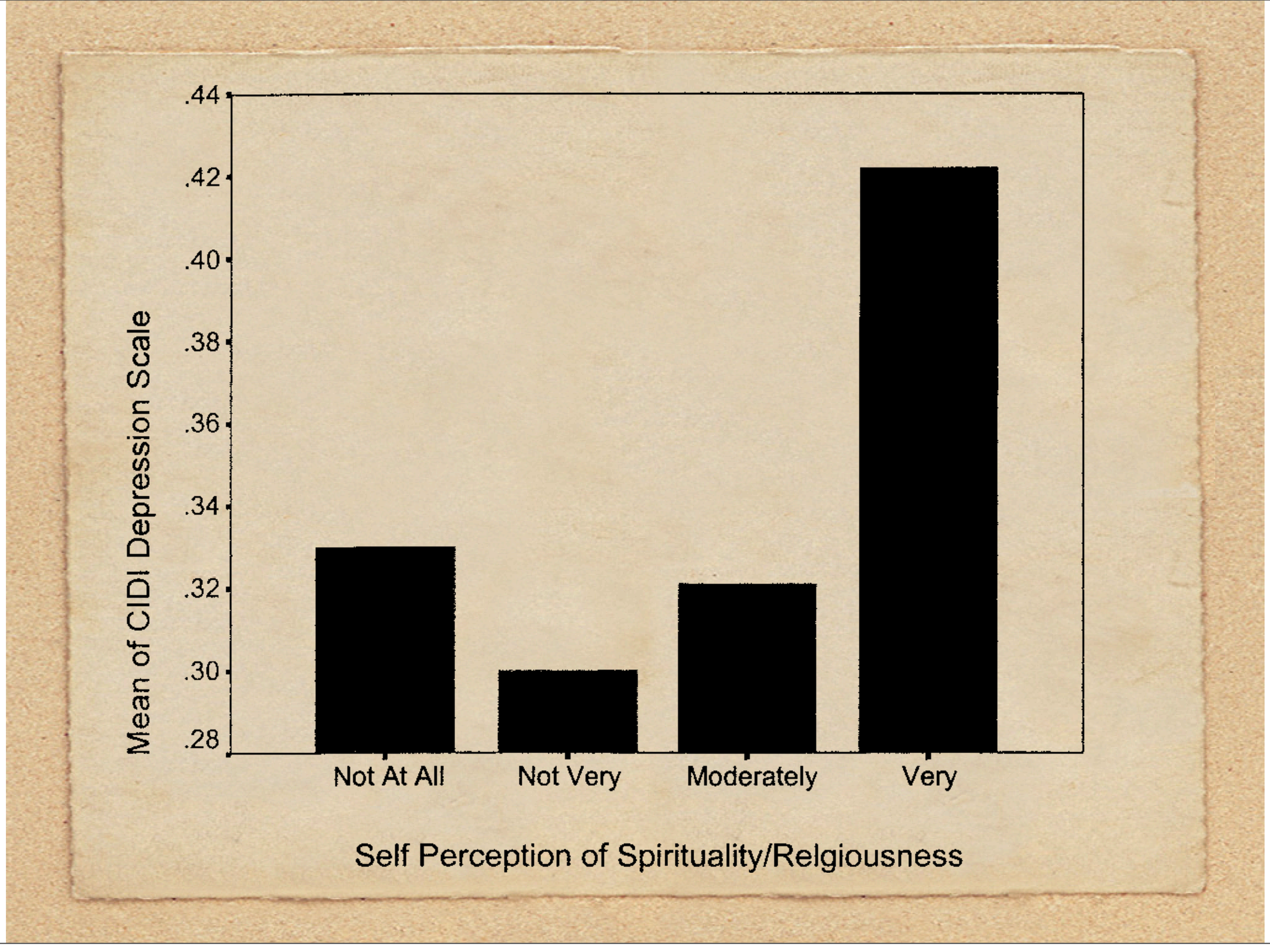

This is one of the graphs from the article. The y-axis values represent values on the CIDI depression scale. Along the bottom are the categories for frequency of attendance at church or synagogue or the equivalent. It seems pretty convincing that people who attend worship services at least weekly have much less depression than those who don't attend at all.

But I want you to take note of the y-axis once again. It doesn't start at zero, it starts at 0.24.





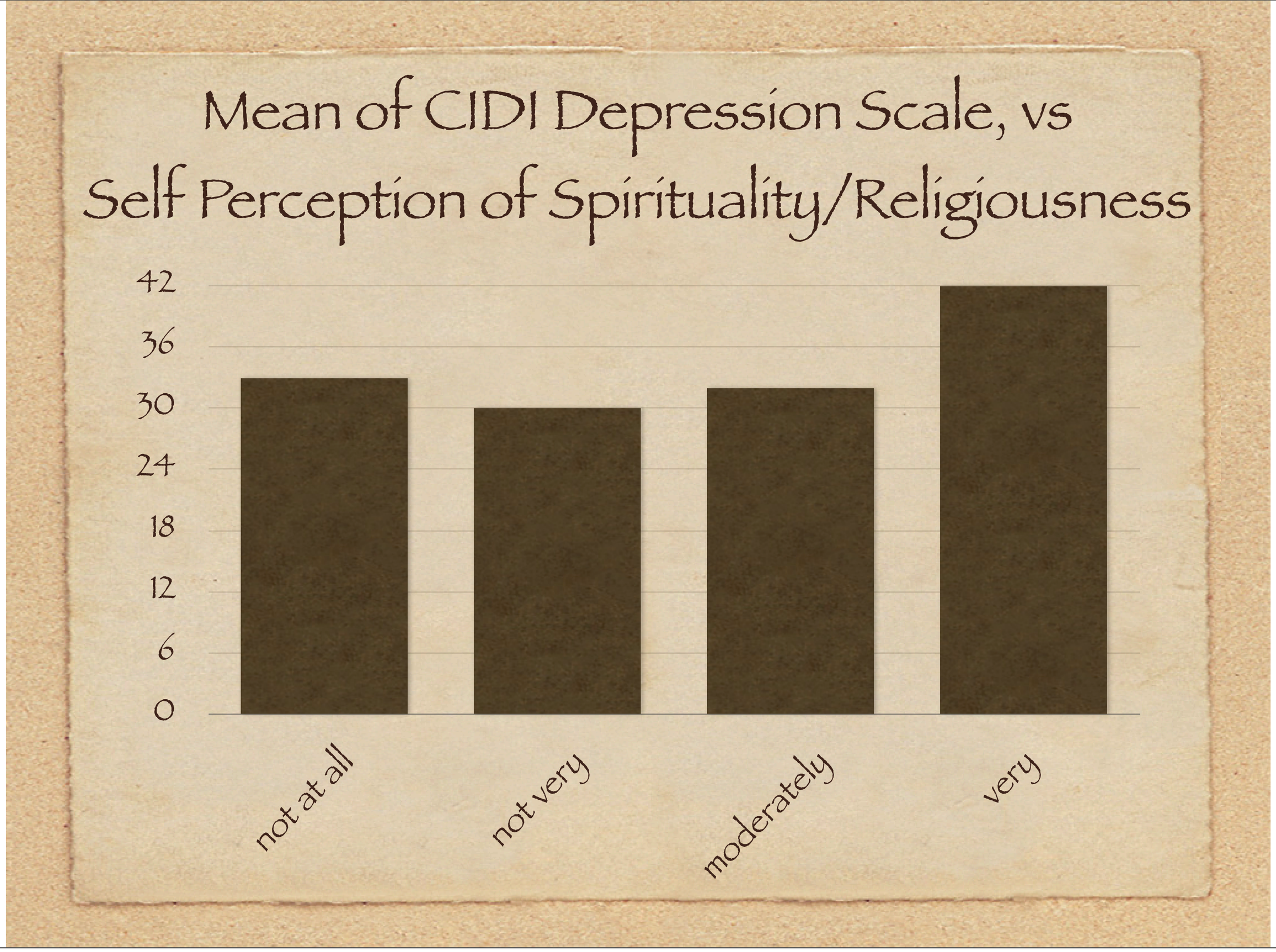

I've redrawn the graph so the depression values go from zero to .4 . Now the differences appear much less impressive.






This chart is from the same article. Again, on the vertical y-axis, the average values for depression are plotted, and the categories on the horizontal x-axis in this case are self-perception of spirituality or religiousness. Again, a striking difference between very spiritual people and moderately or less spiritual or religious, but this time, the very spiritual group are more depressed.

But the y-axis again does not begin at zero.






So when it's replotted, the differences seem much less striking, don't they?

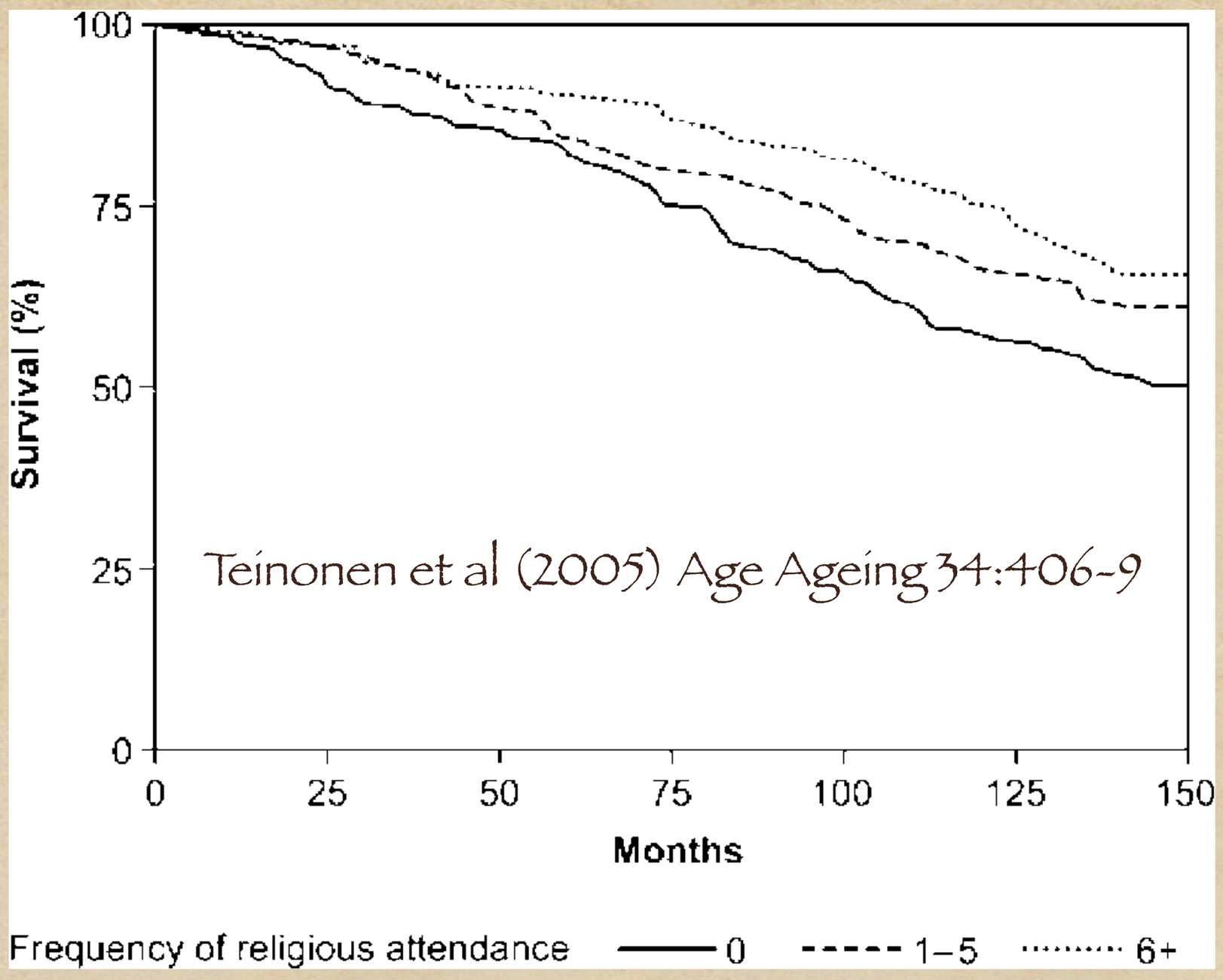
It's really a question of shaping your perceptions, marketing, if you like. The researchers are trying to make a make a point.

However, even if the differences are not so striking when the graphs are drawn properly, the point made remains valid: frequent worship service attendance is associated with less depression, while high degrees of self-perceived spirituality are religiousness are associated with more depression.

- Religious attendance and 12-year survival in older persons in Finland
  - USA: 43% attend religious services at least weekly; Finland: 1.1%
  - however: 47% of all Finns pray at least monthly
  - 85% of Finns belong to the Evangelical Lutheran Church
  - 91% of 15-year-olds are confirmed



Here's another study, this one on aged Finns. Again, attendance at worship services is the independent variable, and the researchers are looking for an influence on 12-year survival rates. But bear in mind that the religious democratics of this group are vastly different from those of North Americans.




Teinonen et al (2005) Age Ageing 34:406-9

**Figure 1.** The Kaplan–Meier survival curves for women by frequency of religious attendance (times a year).



There was no association between religious attendance and mortality for men.
The association in women could not be explained on the basis of smoking, medication, or depression.

- Exclusion criteria:

1. no attempt to control for confounders
2. cross-sectional design
3. inadequate measurement of religion or spirituality or of physical health
4. no statistical analyses
5. earlier reports on the same cohort

Powell, Shahabi, Thoresen (2003) Am Psychol 58:36-52



Rather than going through all the relevant research myself, I looked for review articles. ❤ Here's one that was published 2 years ago in the journal "American Psychologist".
This article summarizes the evidence for a linkage between religion or spirituality and physical health. Instead of a more usual meta-analysis approach, a levels-of-evidence design was used. ❤ This slide shows the reasons why studies were excluded from the analysis. ❤
For #1, basic confounders that needed to be taken into account were age, gender, and ethnicity. ❤
For #2, cross-sectional designs were excluded because a cross-sectional design cannot take into account temporal considerations; ie, the religion or spirituality should be there before the physical health measurement. ❤
#3: an inadequate measurement could be one based on a secondary measure, for example, inferring religiosity from living in a specific neighbourhood. Physical health assessment using only a self-report questionnaire would also be considered inadequate. Why? ❤
#4: what if the reported linkage was due to chance? ❤
#5: only the report with the longest follow-up was included. ❤

- Criteria for evaluation of included studies:

1. adequacy of control for confounders
2. imprecise measurement of religion or spirituality or of covariates
3. failure to control for multiple tests
4. post hoc observation in a subgroup
5. adequacy of control for established protective factors

Powell, Shahabi, Thoresen (2003) Am Psychol 58:36-52



For any given study that was included in the analysis, the quality of the evidence was rated using the criteria shown on this slide. Controlling for confounders such as age and gender was important; also the use of adequate ways to measure religion or spirituality.

I won't bore you with details of why #3 and 4 are important. However, #5, adequacy of control for established protective factors. What are the known protective factors for physical health?

Healthy lifestyle behaviours, social support, and depression. Healthy lifestyle includes avoidance of smoking, regular exercise, and moderate alcohol consumption.

These factors are often characteristic of religious people already. So we are basically looking for a linkage which cannot be explained by these known factors.

| Hypothesis | Strength of evidence |
|---|---|
| Church/service attendance protects against death | persuasive |
| Religion or spirituality protects against cardiovascular disease | some |
| Religion or spirituality protects against cancer mortality | inadequate |
| Deeply religious people are protected against death | consistent failures |
| Religion or spirituality protects against disability | consistent failures |
| Religion or spirituality slows the progression of cancer | consistent failures |
| People who use religion to cope with difficulties live longer | inadequate |
| Religion or spirituality  improves recovery from acute illness | consistent failures |
| Religion or spirituality impedes recovery from acute illness | some |
| Being prayed for improves physical recovery from acute illness | some |

Powell, Shahabi, Thoresen (2003) Am Psychol 58:36-52



This table presents the overall results of the analysis.

The best evidence exists for church or service attendance as a protector against dying, as shown in the top row. Six out of the nine studies on healthy populations that were included in the analysis showed a relationship, on the order of a 25% reduction in mortality, after adjustment for the known risk and protective factors of healthy lifestyle, social support, and depression.

The finding that religion or spirituality impedes recovery from acute illness may have to do with the likelihood that people turn increasingly to private religious practice when they develop physical impairments.

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| Religion or spirituality impedes recovery from acute illness | some |
| Being prayed for improves physical recovery from acute illness | some |

Powell, Shahabi, Thoresen (2003) Am Psychol 58:36-52



The last hypothesis, that being prayed for improves recovery, is a test of whether human intention can affect the physical world at a distance. Only 3 studies of this hypothesis were sufficiently well done to be included in the analysis. Two studies, of ICU patients, showed significantly better hospital course but no difference in the number of days in the ICU or in the hospital, between the prayed-for group and the control group. The third study, of AIDS patients, showed a difference in terms of medical utilization, but this difference disappeared when minority status was taken into account.

- What could account for these findings?
  - regular church/service attendance encourages meaningful social roles providing self-worth and purpose through helping
  - religious social support may be deeper and broader that in secular settings
  - experience of positive emotions in the service
  - keeping the Sabbath: rest and rejuvenation
  - role models



❤ What could account for these findings?

❤ First, the idea that helping others is a meaningful social role.
Contrast this with the more common conceptualization of social support where the emphasis is on being helped.
A study of nursing home residents showed that those given work responsibilities lived longer than those relegated to passive roles.

Here is a relevant quote from another study:
“Activities that encourage helping, such as volunteerism, are common among congregation members and have been shown to reduce mortality.”

The reality is that probably most people in the helping professions are there partially for this reason.
❤ Religious social support may be deeper and broader.
Deeper in the sense of sacred experiences, or experiences that provide a global meaning to life. Broader social support in a personal crisis may include help with children, financial help, meals, emotional support, and moral support for such virtues as forgiving.
❤
In a service, positive emotions may include a transcendent state arrived at through prayer, receiving the sacraments, or appreciating the beauty of the setting. In such a state, “the body and its frailties don’t matter much”. I might add that vigorous singing may stimulate endorphins and cause a natural “high”.
❤
The article mentions the possibility that rest is healthful. I suggest that it may be the opposite, that getting up early with a specific purpose is healthier than getting up late and then watching TV.
❤
In the congregation, you will find people who model a variety of positive, hopeful, compassionate and caring behaviours, attitudes, and beliefs. This may be especially helpful in demonstrating calm coping in situations of pain and suffering. ❤

- What should we do?
  - governments should require regular attendance at religious services
  - force sick people to volunteer to help others
  - every service of every religion must have revival-style hymn singing



So if we want to apply the results of this research to improve people's health, what steps should we take? I offer three suggestions:

| Religion | Spirituality | Positive Spirituality |
|---|---|---|
| community focused | individualistic | identifies features associated with positve outcomes. A blend of community focused and individualism. |
| observable, measurable, orrganized and/or more extrinsic | less visible, measurable; more subjective and intrinsic | measurable, extrinsic and intrinsic |
| formal, orthodox, organized | less formal, orthodox | less formal, orthodox, and systematic |
| behavior oriented, outward practices | emotionally oriented, inward directed | emotion and behavior oriented |
| authoritarian in terms of behavior | not authoritarian, little accountability | accountable to engaging in positive actions |
| doctrine separating good from evil | unifying, not doctrine oriented | unifying, promoting life enhancing beliefs |

Crowther et al (2002) Gerontologist 42:613-20



The concept of positive spirituality has been proposed to strengthen a model for successful aging that already includes: engage in active life; minimize risk & disability; maximize physical and mental abilities. Positive spirituality may be a way for religious and spiritually minded organizations to participate actively in health promotion.

It may help to bridge the divide between studies showing positive health related to public religious practices and negative outcomes associated with private religious attitudes or behaviours.
Unfortunately, the idea seems to have become that of co-opting various faith-based or other community organizations to promulgate the researchers' ideas for improving health.

# What I really think

- People committed to their faith:
  - eat more fish
  - are less lonely
  - smoke less
  - get up earlier
  - have more committed relationships
  - don't sleep too long or too short



❤
fish: omega-3s
❤
loneliness: show article "Harvard Study..."
❤
cigarette smoking article
❤
as a kid, went to school six days a week, and church on sundays. My field of interest is sleep and depression
❤
If you can commit to your faith, you are more likely to commit to marriage. Last week, Peter talked about the importance of good relationships. I agree. Some years ago, I was asked to give a talk on the psychology of aging successfully. I looked at the literature, and concluded that there were four factors that were important: sufficient money, reasonable health, a project or passion, and good relationships.

There are studies showing that marital conflict leads to ill-health: elevations in blood pressure, stress hormones, immune system dysfunction. Show Robles article.
❤
Finally, sleep length. Unmarried individuals are more likely to sleep either longer or shorter than 7 hours (show Hale study). There are 3 large studies showing lowest mortality for people who sleep 7 hours.

# What I really think

- offspring of religious couples are more likely to be religious
- also have better health if parents are committed
  - eg less antisocial behaviour
- thus, religion is adaptive!



Richard Dawkins - idea of "memes". He maintains that the most powerfully inherited trait is religious affiliation.
If the parents have a good relationship, their children will have better physical health (show Troxel article)
Why should they have better health?
Many possibilities: some are encapsulated in the idea of antisocial lifestyle, with substance abuse, drunk driving, fighting after drinking, sexual promiscuity, heavy smoking. Show Shepherd article.

# The assigned readings

- Meisenhelder & Chandler:
  - does correlation imply cause - effect?
  - coping vs managing
  - would this study have made it into the analysis that I mentioned earlier?