



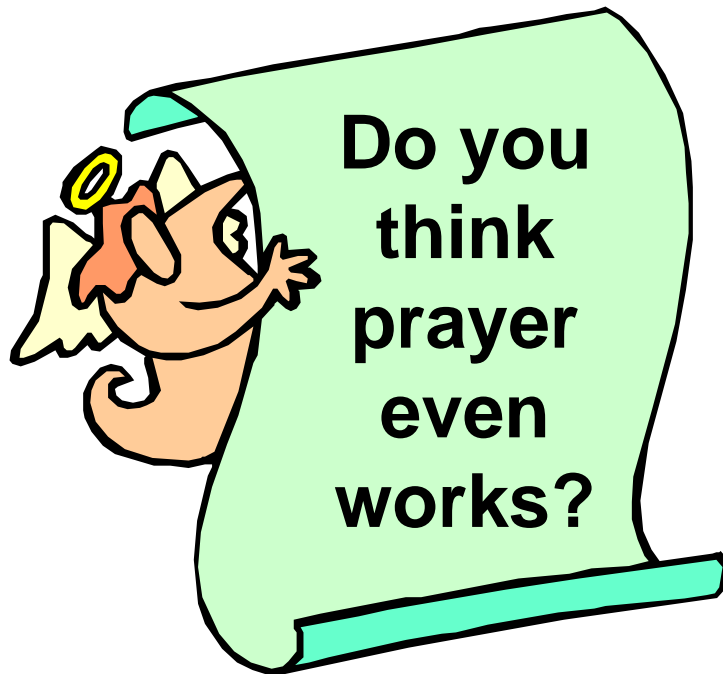
Prayer Changes the Brain!

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thebrain@Arlenetaylor.org
Brain References
www.arlenetaylor.org
www.LLM.life

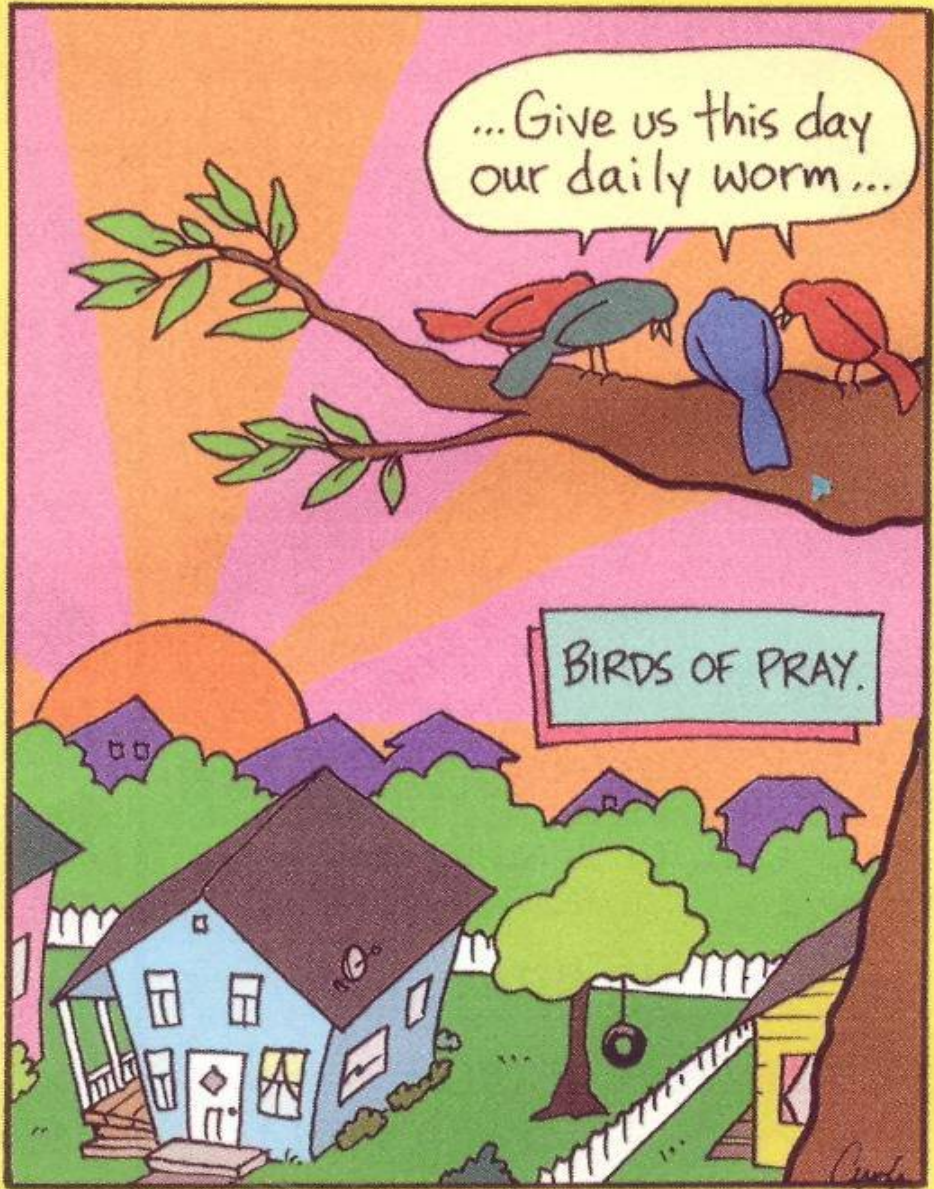


9-18

Everything begins in the brain—whatever else humans are, researchers seem in general agreement that the human brain is innately relational, sexual, and *spiritual*



Prayer has long been connected with spirituality—an innate brain function that allows you to experience a sense of awe and connection and involves the spirit with which you live life—and with religious activities



A survey released in 2002 by the National Center for Complementary and Alternative Medicine:

- **43% of Americans pray for own health**
- **24% pray for the health of others**



A 2010 Baylor Institute/Gallup Organization Survey:

- **79% have prayed for their own healing**
- **87% have prayed for the healing of others**
- **26% have participated in 'laying on of hands' for the sick**

Frequency of Prayer

—Pew Research Center 2012



U.S. general public

Unaffiliated

 Atheist/Agnostic

 Nothing in particular

Affiliated

 Christian

 Protestant

 White evangelical

 White mainline

 Black Protestant

 Catholic

 White Catholic

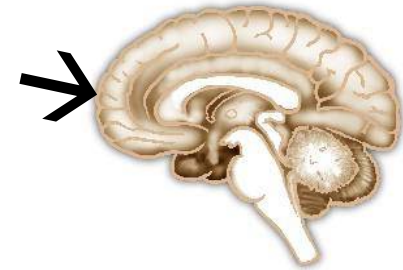
 Hispanic Catholic

Daily+	Weekly/ Monthly	Seldom/ Never
%	%	%
58	21	19
21	20	58
6	11	82
27	24	48
66	22	11
67	21	10
72	18	9
82	13	5
49	31	18
78	15	6
58	30	11
55	31	12
63	28	9

Prayer is the process of communicating with God or a Higher Power as you perceive it —Dictionary

Prayer is a form of meditation; the frontal cortex lights up during prayer

—Candace B. Pert, PhD INH Researcher



Prayer is a universal *being-and-not-doing* phenomenon, an attitude of the heart . . . Although science tells us that prayer works, it cannot tell us how it works

—Larry Doss, MD *Prayer is Good Medicine*

- **Prayer improves the coordination of communication and electrical patterns between the two hemispheres**
- **It improves the efficiency of body functions in runners who pray or meditate while they are running (maybe in the brain and body of other athletes who pray, as well)**
- **Heightens learning ability and creative problem-solving**
- **Positively affects heart attacks, wound healing, anxiety, and headaches**



Prayer can be viewed as one of the ultimate activities of the frontal lobes of the neocortex

—Neil Nedley, MD *Proof Positive*

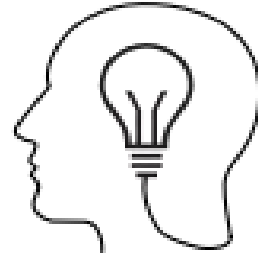
- **Prayer decreases pulse and breathing rates and lowers blood pressure**
- **Slows the aging process (reduces brain-wave activity which decreases brain metabolism and oxygen requirements without lowering cognitive abilities)**



—Larry Dossey, MD

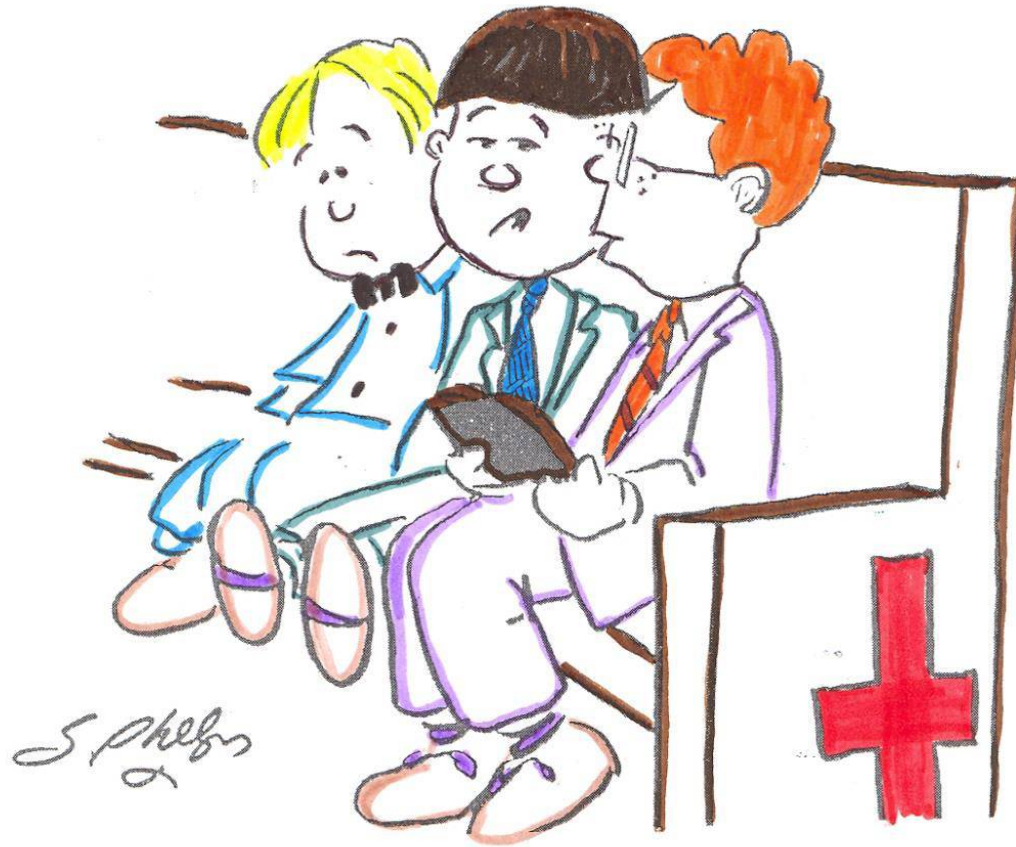
Growing up in terms of prayer:

- What were you taught?
- What did you learn?
- What was role modeled?
- Did you pray personally?
- What made sense to you?
- What was puzzling?



- ✓ Rosary Prayer – *Hail Mary, full of ...*
- ✓ Internet Prayer – *Lead us not into temptation and deliver us some ...*
- ✓ Dinner Prayer – “I don’t know what to say . . .”

**Prayer can
be confusing
for children!**



***He closes his eyes, it's prayer and meditation;
I close my eyes, I get grounded for sleeping!***



Pray without ceasing —1 Thessalonians 5:17

The Greek work for “without ceasing” is *adialeiptos*, which implies *constantly recurring*—anytime, anywhere, any style, in any attitude, and about anything

God is available 24/7 anywhere in the universe, regardless of time zones

Prayer does not demand that we interrupt our work but that we continue working as if it were a prayer

—Mother Teresa



Prayers can be offered in many different ways:

- **Say them aloud**
- **Speak them to yourself silently**
- **Write them down**
- **Meditate in your mind when you can't find the words**
- **Chanted or sung with or without musical accompaniment**
- **Individually, group, corporate as in a large meeting**



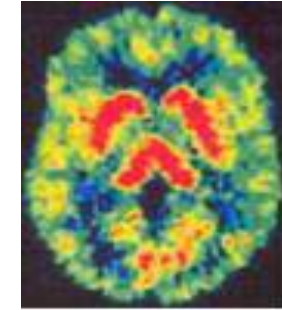
Different types of prayers affect areas of the brain differently—but they all appear to impact neurological function, physical, and emotional health in positive ways

- **Can increase blood flow to frontal, parietal, temporal, and limbic areas**
- **Can decrease metabolic activity (uses less energy)**
- **May trigger deafferentation, type of pain relief**



—Andrew Newberg, MD

Dr. Newberg is co-founder of Neurotheology—the study of the relationship between the brain and spiritual Or religious phenomena; he has studied more than 150 brain scans to observe brain changes that occur during types of prayer, meditation, and religious practices



**—Andrew Newberg, MD,
*How God Changes Your Brain***

Dr. Dale Matthew of Georgetown University found 212 research studies showing medical benefits of prayer and religion on one's health



Prayer has been found to be effective and beneficial in the clinical treatment of patients

“When we pray, we reap tremendous physical, emotional, and spiritual benefits... we may also reap the benefits from the prayers of others on our behalf

—Mind/Body Health Journal

Prayer for beneficial healing and quick recovery in a 10-month study of 192 cardiac patients

**—Randy Byrd MD, SF General Hospital,
CCU, Double Blind**



Prayed-for Group had fewer complications

- **No intubations**
- **3 required antibiotics**
- **6 had pulmonary edema**

Control Group had increased complications

- **12 required intubations**
- **16 needed antibiotics**
- **18 had pulmonary edema**

Seven groups around the world prayed for 150 angioplasty patients

**—Mitchell W. Krucoff MD
(Duke U Med Center, NC), Double-Blind**

Prayed for specific patients by name during angioplasty procedures —patient-prayer group match was not based on denomination

- ✓ **Patients who were prayed for had far fewer complications**



Prayer for pregnancy in 199 women receiving in-vitro fertility treatments in Korea

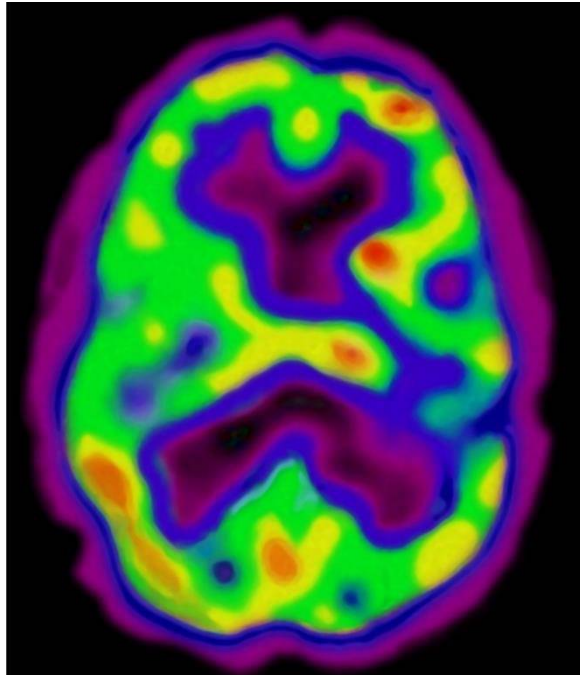
**—Rogerio A. Lobo, MD
Columbia University, S of M, NYC**

Half the women were randomly assigned to Christian prayer groups in Canada, USA, and Australia

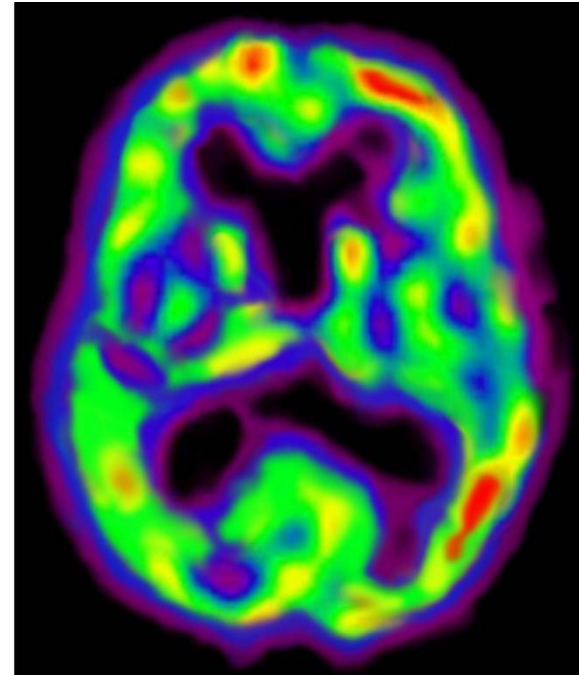
- ✓ **The pregnancy rate was doubled among the women who were prayed for**



**Not
praying**



**PET
Scans**



Praying

Conclusion: Prayer, if done regularly for at least 12 minutes daily, may slow the age-related decline of the frontal lobes

Reflecting on a spiritual or scriptural passage, picturing God or your Higher Power (by any name) in a positive way, or saying a prayer that has special meaning for you can enhance your memory

We do not know what we ought to pray for, but the Holy Spirit intercedes for —Romans 8:26



I've seen prayers answered—but often, in my experience, if you get what you pray for, you've really shortchanged yourself
—*Anne Lamott*



Prayer Benefits You!

Many studies have shown that when you pray for others they can receive benefits—especially if they believe in prayer and know you are praying for them

However, the greatest benefits of prayer and meditation may accrue to the brain that is actually doing the praying

In that way, prayer appears to resemble forgiveness: the person who does the forgiving and the person who does the praying may benefit the most

Activities that engage the frontal lobes protect against age-related deterioration (shrinkage) associated with:

- **Loss of memory**
- **Overall loss of mental functioning**
- **Dementia**



Meditation and prayer are excellent brain-power boosters as they battle stress (e.g., promote synchronized brain rhythms and reduce levels of stress hormones); they give you some control over the way in which your brain ages

—Kenneth Giuffre, MD

Prayer, if done regularly for at least twelve (12) minutes daily, may slow the age-related decline of the frontal lobes (anti-aging strategy)



**Never use a negative thought in prayer;
only positive thoughts get positive results**

—Norman Vincent Peale

**The Lord's Prayer – all translations I checked are
written in positive language** **—Matt 6, Luke 11**

Be careful how and what you pray for! Evidence suggests that like drugs and medications, prayer, can have effects that are positive, neutral, or negative—in one study, 1 in 20 Americans admitted they had prayed that others will be harmed

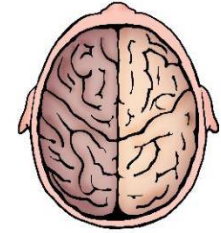


—Larry Dossey, MD

Since prayers most impact the person who is doing the praying the most, there is some concern about the effect negative prayers may have on their brain

**Passive
Prayer**

Focus on a sound or picture and try to clear the mind of thoughts



**Active
Prayer**

Focus on a specific thought or idea (an active prayer triggers a slightly different brain pattern as compared to a passive prayer) —Andrew Newberg, MD

**Directed
Prayer**

Pray for a specific outcome such as an increase in immune system activity

**Non-
Directed**

Pray in general ‘May the best thing happen’

—Larry Dossey, MD

1. Prayer is instantaneous – nothing can block it, not even a lead-lined room

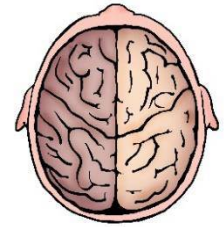


2. It is not some ‘conventional’ form of energy that is ‘sent’ and ‘received’ (so it can’t be electromagnetic energy)

3. A person’s own belief can strengthen the effect of prayers (placebo effect) but it works even when what or who is being prayed is unaware of the prayers

4. Distance is not a factor in how well prayer works: It can be Local (immediate presence) or it can be Nonlocal (at any distance)

Intercessory prayer, praying for someone else bears a strong resemblance to nonlocal events studied by quantum physics as possessing three common characteristics:



- **Unmediated – distant changes do not depend on the transmission of energy or of an energetic signal**
- **Unmitigated – strength of the changes does not become weaker with increased distance**
- **Immediate – distant changes take place simultaneously**

- **Reciting - The Lord's Prayer**
- **Ritual – Rosary, Book of Common Prayer**
- **Extemporaneous – Composed on the spot**
- **Petitional – Requesting a favor for yourself**
- **Intercessory – Requesting a favor for another person**
- **Colloquial – Asking guidance or forgiveness**
- **Thanksgiving – Giving thanks and praising**
- * **Meditative – Pondering, contemplating, listening
(meditative prayer gives the greatest personal benefits)**



Prayers that focus on gratitude, celebration, awe, or a positive vision of the future (as well as rejecting anger and resentment) have been found to be the most beneficial and can:

- **Increase compassion**
- **Reduce depression and anxiety**
- **Relieve stress**
- **Lower blood pressure and heart rate**
- **And eventually even extend life**



Bottom line: no two brains are identical in structure, function, perception, or approach to prayer and meditation



Studies are showing empirically that prayer can positively impact your brain, health, and potential longevity—as well as those for whom you pray

Find your own prayer path and make it part of your Longevity Lifestyle—because it Matters