The Salutogenesis-Oriented Session: Creating Space and Time for Healing in Primary Care

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Primary care in America is in need of a rescue. Clinicians are asked to see more patients in a day that only allows time to focus on a physical symptom or disease process. They do not have time or space to use their humanism to develop insight toward what the patient needs for the symptom to resolve, and they are often forced to suppress it with technology. This results in a very expensive medical system that leads to frustration for a clinician who realizes that this is not the way toward facilitating health. This clinically focused paper proposes the incorporation of a healing-oriented session into the delivery of primary care to

"Never mistake knowledge for wisdom. One helps you make a living; the other helps you make a life."–Sandra Carey¹

Most clinicians who go into primary care do not do so to simply make a living, they go into the field to touch lives. One of the most satisfying ways to do this is through developing relationships. Therapeutic relationships with patients can give insight into what is needed for the body to self-heal. This salutogenic process (*salud* = health, *genesis* = creation of) gives the practice of primary care meaning and purpose. Engel pioneered the importance of hearing a patient's story to develop an understanding of how a complex human being finds health in relation to her/his unique interaction of biopsychosocial and spiritual influences.^{2,3} Despite the established importance of this model, primary care practitioners feel significant barriers to incorporating it into care, including lack of time, training, and appropriate reimbursement.^{4,5}

Failure to incorporate the benefits of the biopsychosocial model will impede understanding of how the physical symptom and the nonphysical emotion are communicating. The importance of this is often lost in the 10-minute office visit where there is only time to explore the physical complaint. Knowing what is going on in someone's life helps create understanding of what is going on in the body. This emotional connection can have a dramatic effect on health. It shifts focus from addressing a symptom to exploring its underlying cause. One striking example of the impact emotions can have on physical health was demonstrated in a study

Corresponding Author. Address: 777 South Mills Street, Madison, WI 53715-1896 e-mail: DRakel@uwhealth.org bring focus toward the creation of health (salutogenesis). A salutogenesis-oriented session (SOS) honors relationship-centered care and will provide a unit that can then be studied to see if it has a positive influence on cost, quality of care, and provider satisfaction.

Key words: Salutogenesis, healing-oriented session, primary care, relationship-centered care, SOS

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cohort of 19 people, all of whom were found to have ischemic cardiomyopathy with a reduced ejection fraction, apical hypokinesis, elevated troponin, and inflammation of their myocardium. When cardiac catheterization was performed, 18 of them (95%) had normal coronary arteries. The common predisposing factor they all shared was a severe emotional stressor, with the above findings resolving over time.⁶ Good listening may be one of our most effective therapeutic tools.⁷ At the very least, it allows us to connect with our patients at a deeper level that honors relationship-centered care.

This paper's purpose is to bring to the forefront the need to create an office visit focused on healing, which allows clinicians to combine their humanism with their technology for true health-oriented care.

WORKING TOWARD A SOLUTION TO BRING HEALING BACK TO THE PRIMARY CARE ENCOUNTER

Primary care clinics have different types of office visits, including the physical exam, procedures, well-child checks, and the standard, 15-minute visit. The only way to work within this system, especially as the numbers of patients with multiple chronic illnesses continue to rise, is to redistribute time based on the patient's complexity. Time is often stolen from the patient with a sinus infection to spend with the patient who is depressed. When there is not enough time to listen to the story, care often shifts from a healing focus to one of symptom management. This approach requires more expensive, external interventions. An office visit needs to be created with a primary goal of learning what is required for the body to self-heal. This will not replace sound medical treatment but will add to care by creating time and space to understand what is going on in someone's life that may be contributing to a symptom and its progression.

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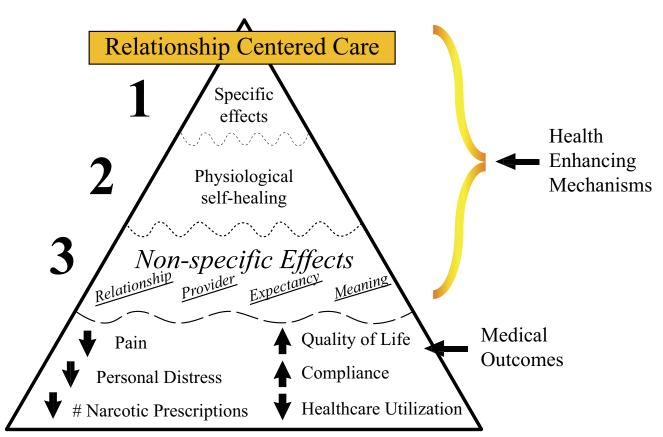


Figure 1. Health-enhancing mechanisms can be divided into three categories: (1) specific effects (effects specifically attributable to an intervention, such as a medication or surgery), (2) physiological self-healing (natural course of disease), and (3) nonspecific effects (placebo effects, expectancy effects, physician effects, meaning effects, etc). The salutogenesis-oriented session utilizes all mechanisms in the creation of health; thus, if a specific effect is prescribed, its potential benefit will be enhanced with the conscious application of nonspecific effects.

The Salutogenic-Oriented Session

The term *salutogenesis* was introduced by the American-Israeli medical sociologist, Aaron Antonovsky.⁸ He was interested in exploring the "origin of health" rather than looking for the cause of disease (pathogenesis). This interest was sparked by epidemiological research on women who had survived the holocaust. He found that despite severe emotional stress, there was a group of women who had good health and lead happy lives despite all that they had gone through.⁹ This paper borrows Antonovsky's term, salutogenesis, to stress the importance of understanding how to generate health based on the unique attributes of the individual.

Time and space need to be protected in the clinic schedule to create a healing-oriented ritual where expectation is created—for both patient and practitioner—of the exploration of what may be at the root of the symptom so it can possibly be resolved. *Ritual* and *ceremony* generally refer to processes that separate the ordinary from the extraordinary. Some of these processes are repetitive (rituals) and others may be performed only on special occasions (ceremonies).¹⁰ It is important that this office visit be perceived as extraordinary from the routine office session, with a goal of fostering vision, dreams, and new hope.

Creating a healing ceremony or ritual in the primary care clinic will focus intention for the body's healing response to

unfold, a process that has been documented extensively in the literature as the placebo effect. This process utilizes expectation and belief, which have been found to work as well as morphine for pain,¹¹ arthroscopy for osteoarthritis of the knee,¹² internal mammary artery ligation for coronary artery disease,¹³ and transplanted fetal nigral cells for Parkinson's disease,¹⁴ to name a few. In fact, the expectation combined with a surgical ceremony but no surgical intervention (sham) worked just as well as the surgical intervention in many of these studies. Some may say that this proved that the surgical procedures did not work, but in fact, the surgical ceremony with expectancy and belief worked very well, even if the intended surgical treatment was not carried out. This shows the power of the ceremony from which a specific therapy is prescribed. These nonspecific effects (relationship, belief, and expectancy) can influence healing even if the therapy studied does not have beneficial specific effects or is not carried out. (Figure 1).

Foundations of a Healing Encounter

The healing encounter needs to be reproduced and honored in the office setting. The key ingredients toward salutogenesis can be combined to stack the deck in favor of a healing response. This will create a ceremony and ritual that can have as much benefit as the therapy prescribed. Foundations of a healing encounter in psychotherapy were described by Frank and Frank.¹⁵⁻¹⁷ They included the following four ingredients:

- an emotionally charged relationship with a helping person
- a healing setting (an expected place to go for healing)
- an explanation for the symptoms that results in a sense of control and understanding
- a ritual, procedure, or plan that involves active participation of both parties, which each believes will restore the person to a state of health

When a patient with depression is treated, the health benefit is often attributed to the medication, and the four healing steps that were undertaken before the medication was prescribed are often ignored. The following example of a patient with depression can help illustrate these nonphysical, internal influences.

A depressed person whose life is in chaos comes to see you, a person with whom there is a relationship based in trust. The patient comes to a healing setting (medical clinic) with the expectation that s/he will receive help. The patient tells you her/his story, and you give a logical explanation for symptoms being experienced (a reduction in the level of serotonin). This process gives a sense of control and understanding. Both you and the patient agree on a prescribed therapy that both believe will restore health. You then write down the 'answer' on a prescription pad and hand it to the patient. This completes the healing ceremony.¹⁸

We often give the credit of healing to the physical, external factor, although what happens between clinician and patient before the pill is prescribed may prove to have a stronger effect. In a study comparing Saint-John's-wort, sertraline (Zoloft), and the healing ritual (placebo) for major depression, it was not the plant or the pill that had the greatest effect, but the placebo eight weeks after initiating therapy.¹⁹ Research on medications for depression, including a review of data submitted to the Food and Drug Administration, found little difference between the medication and the placebo. Both the medication and the placebo had beneficial effects.²⁰

PRACTITIONER EFFECTS

The power the practitioner can have on facilitating healing is enhanced if there is a relationship based on trust, empathy, and compassion. A salutogenesis-oriented session (SOS) will not only allow these healing effects to grow but will stimulate healing in the process. In a study looking at practitioner effects comparing placebo with the drug imipramine for clinical depression, it was found that a good therapist able to develop trust and rapport had better results with a placebo than did a poor therapist with the active drug.²¹ Another study showed that the ability of therapists to develop trusting relationships correlated positively with how well their patients responded to prescribed medications compared with therapists who were less talented at developing rapport.²²

In research on distant healing, it appears that healers who send positive intention toward those in which they have already established a connection of empathy and compassion compared
 Table 1. Summary of Steps to Create an SOS in the Primary Care

 Clinic

- Educate front office staff on how to create SOS template for scheduling purposes
- Create a 40-minute time slot for the SOS session
- In at least one exam room, create a healing-oriented environment using natural light (if able), artwork, calming colors, and textures and elements of nature such as a plant or water element
- Create positive expectation
- Be fully present
- Listen and gently explore emotions with your questioning
- Have a referral network of practitioners that offer support to continue the healing process
- Write down a plan that both you and the patient believe in
- Code appropriately to support this work (99204, new patient; 99215, established patient)
- Consider being part of a research network to study the effects of healing-oriented sessions in healthcare delivery

SOS, salutogenesis-oriented session.

with those they have not is one of the key influences of a positive effect.²³ Eleven indigenous healers from Hawaii were asked to create positive intention for people with whom they had a close bond. When functional magnetic resonance imaging was used to evaluate the receivers of the healer's positive intention, there were significant changes in the brains of those with whom compassion and empathy had already been established.²⁴

Primary care is founded in relationship-centered care, and the primary care practitioner has already established trust, which will enhance the care provided in the SOS. The most effective healers realize this and use these dynamic influences to obtain the best results with the therapy or technique that is prescribed.²⁵ Table 1 provides a summary of key steps toward creating an SOS, and Table 2 provides a mnemonic the author developed to summarize the key ingredients of a healing-oriented encounter.

HOW TO CREATE AN SOS IN THE PRIMARY CARE CLINIC

Protect Time in the Schedule

Just as you would schedule a physical for 40 minutes, you can schedule an SOS. These visits are not for everyone, but for

Table 2. RELIEVE Mnemonic to Help Remember the Key Influences of a Healing-Oriented Encounter

| Relationship-centered care, built on | |
|--|--|
| Empathy and trust creates a positive environment where the | |
| clinician can | |
| Listen to a complicated story that creates | |
| Insight into a problem that results in an | |
| Explanation that is consistent with the patient's | |
| Values leading to | |
| Empowerment and action towards health | |
| | |

patients whom the clinician feels need more time to focus on lifestyle issues that may be contributing to their health concerns. Examples may include new onset autoimmune disease, new onset headaches with no physical cause, irritable bowel syndrome, or chronic fatigue.

You may want to place these appointments on a specific day of the week or inform front office staff to protect at least 40 minutes for these sessions when requested. This amount of time is needed to hear often-complicated stories and organize many different bits of information relevant to individuals and their needs.

Create Space

The importance of the physical space has been known since the time of ancient Greece, where the temples to Asklepios, the God of healing, were designed to surround the patient with nature, music, and art to restore harmony.²⁶

Set aside at least one exam room for these sessions. If possible, pick one that is quiet and has natural light. Make the room feel warm and inviting to encourage comfort in exploring emotions. Decorate with warm colors and use art and fabric to add texture. Avoid a lot of medical paraphernalia, which can give a cold and uninviting feel. If it is difficult to decorate a room, simply bring in an element of nature such as a flower, water fountain, or plant. Even the smallest elements of nature have been found to reduce stress and muscle tension.²⁷

Create Positive Expectations

To create positive expectation, a typical scenario for having a patient return for an SOS may go something like this:

There is no evidence of a tumor, and we have ruled out other physical causes for your headaches. We don't have time scheduled today, but I would like for you to come back on a Wednesday morning when I have set aside time for a session that will allow us to explore other aspects of life that can have a significant impact on physical health. I want to better understand what is going on that may be influencing the amount of pain, fatigue and sleep problems you have been experiencing. Often in these sessions we find common underlying causes that can help us get at the root of many symptoms.¹⁸

Creating this type of expectation may also help with clinical efficiency. Just as expectancy is created for an SOS, it can also be created for a short "in and out visit" that tells the patient that this visit is focused on checking on the rash or the painful ear. Creating better expectation for the variety of care that is provided in primary care will enhance quality and time management.²⁸

Be Fully Present and Listen to the Story

Patients can sense if we are present and truly listening to them or off somewhere in our minds. This perception of feeling "listened to" matters. Being present means that we are listening attentively without judgment or preconceived thoughts. This allows us to see the patient for who she/he truly is.²⁹ It brings attention to the patient's needs so that we don't simply fit the person into a diagnostic box followed by a reflex of therapies that were ingrained from our medical training. Listening to the patient's life narrative leads to a deeper understanding of how to guide her/

him toward health and the alleviation of suffering.³⁰ It is this step that bridges the gap between our knowledge of evidence and our relationship-centered insight that allows more accurate therapeutic decisions.^{31,32}

Offer Support

An SOS session can result in the disclosure of emotionally charged information related to past traumas or events. The primary care practitioner is in an ideal position to help patients heal through disclosure, because people are more likely to discuss these stressful events with someone who is accepting and whom they trust.³³ This in itself has been found to improve physical health, enhance immune function, and result in fewer medical visits.³⁴⁻³⁶ But if emotions are expressed and the patient is not given support to process and continue to learn from them, a salutogenesis-oriented session can turn into a pathogenesis-oriented one. Collaborative care with a team of practitioners that includes a therapist or psychologist is needed to ensure that patients have support to continue to work through these emotions and toward improved health.

Create a Plan

Writing down a plan at the conclusion of the SOS creates a sense of control over perceived chaos and creates a mutual belief that leads to positive action toward health. The plan may be as short as working on mending a relationship, or more involved to include recommendations on nutrition, pharmaceuticals, physical therapy, stress management, and spiritual counseling. The plan is created to enhance a sense of control to empower the patient to transcend the current environment from which the symptoms arose.

In 1987, Thomas published a study showing that a positive clinical visit for a vague viral condition, which gave positive expectations and a sense of control, had a 25% greater effect in symptom resolution compared with a more uncertain approach where the physician said, "I am not sure what is wrong with you" and "I am not sure that the treatment I am going to give you will have an effect." Two weeks after the visit, the positive clinical visit had a 64% recovery compared to 39% with the negative consultation.³⁷

Having a sense of control has been found to reduce autonomic triggers of stress,³⁸ utilization of health services,^{39,40} perceived risk of developing a recurrence of breast cancer,⁴¹ and even to prolong life in residents of nursing homes.⁴²

Having a sense of control over a chaotic process such as a disease also cultivates hope, as the individual feels empowered to work toward goals that give life meaning. Directing focus toward life goals compared with goals related to disease enhances satisfaction for patient and practitioner, as both work toward those things that result in an improved quality of life.⁴³

Code Appropriately

In the future, the economics of healthcare will hopefully encompass the importance of allowing time for health-oriented care. To bridge this gap, appropriate coding is needed to support this work. Reimbursement will likely always honor procedures greater than it will for spending 40 minutes exploring the multiple influences needed to create a path toward health in someone with fatigue and chronic myofascial pain. But the SOS needs to be done in a way that is economically feasible as the system works toward health and healing-oriented care.

Using current coding rules, 40 minutes of face-to-face time is needed to bill a 99204 (new patient) or a 99215 (established patient). It is important to document the amount of time spent with the patient and include that "greater than 50% of time was spent counseling and/or coordinating care." This needs to be included if the clinician is using time as the factor upon which billing is based, compared with specific ingredients of the history, exam, and medical decision making.

POTENTIAL FOR COST SAVINGS

The potential for cost savings with this approach is great if we are able to shift the economic rewards from treating the disease to facilitating health. This requires that we financially honor the practitioner's ability to facilitate health as much as we financially honor how many patients he/she sees in a day. Both are important and need to be brought toward better equality. Having a strong primary care infrastructure based in continuity and relationship-centered care has been found to improve quality of healthcare,^{44,45} reduce hospital admissions,^{46,47} reduce expenditures on diagnostic testing,⁴⁸ and lower total healthcare costs.⁴⁹ This cost savings comes, in part, from the attention given to the internal, nonphysical influences on health. These include helping patients feel understood through exploring their needs and expectations, addressing psychosocial issues, and expanding the patient's involvement and understanding in their health (empowerment).^{48,50,51} If we do not allow the primary care practitioner time to hear the patient's story and form meaningful relationships, we will add to the cost by addressing only the physical problem, which often leads to more dependence on pharmaceuticals, physician visits, and diagnostic tests.

CONCLUSION

Many would state that the ingredients of an SOS are already included in primary care clinics. This may be true, but it is not recognized by the medical system because it is not included within a unit that can be measured. If we can incorporate an SOS with its own code and process into medical practice, we will be able to collect data to see if it reduces medical costs, improves quality of life, and enhances professional and patient satisfaction. Interviews of generalist physicians in Scotland reported that maintaining relationships with patients was the most rewarding aspect of their career. They also felt that understanding their patients in a holistic way was the most important ingredient in improving medical outcomes.⁵² The SOS also resonates with what patients rate as most important in receiving "excellent" care. In a survey by Consumer Reports of 39,090 people, those factors patients liked most about the doctors they rated as excellent included (1) treats me with respect (77%), (2) listens to me with patience and understanding (67%), (3) seems to care about my emotional well-being (64%), and (4) has made efforts to get to know me as a person (42%).⁵³

The SOS will give permission to facilitate a healing-oriented ceremony in a medical culture that is in need of a better balance

between the exploration of health and the treatment of disease. It will bring joy back to the primary care profession by allowing practitioners to work toward those aspects of health and healing that attracted them to the field. Lastly, it will support the future of primary care by showing that having a medical home, based in relationship-centered care, has a healing effect on clinicians and those they serve.⁵⁴

REFERENCES

- Carey S. Available at: http://thinkexist.com/quotation/never_ mistake_knowledge_for_wisdom_one_helps_you/219304.html. Accessed December 11, 2007.
- Engel GL. The need for a new medical model: a challenge for biomedicine. Science. 1977;196(4286):129-136
- Masi AT, White KP, Pilcher JJ. Person-centered approach to care, teaching, and research in fibromyalgia syndrome: justification from biopsychosocial perspectives in populations. *Semin Arthritis Rheum.* 2002;32:71-93.
- 4. Astin JA, Soeken K, Sierpina VS, Clarridge BR. Barriers to the integration of psychosocial factors in medicine: results of a national survey of physicians. *J Am Board Fam Med.* 2006;19:557-565.
- 5. Sierpina V, Levine R, Astin J, Tan A. Use of mind-body therapies in psychiatry and family medicine faculty and residents: attitudes, barriers, and gender differences. *Explore (NY)*. 2007; 3:129-135.
- Wittstein IS, Thiemann DR, Lima JA, et al. Neurohumoral features of myocardial stunning due to sudden emotional stress. N Engl J Med. 2005;352:539-548.
- 7. Jackson SW. The listening healer in the history of psychological healing. *Am J Psychiatry*. 1992; 149:1623-1632.
- 8. Antonovsky A. *Health, Stress and Coping.* San Francisco, Calif: Jossey-Bass; 1979.
- Lindstrom M, Eriksson M. Contextualizing salutogenesis and Antonovsky in public health development. *Health Promot Int.* 2006;21: 238-244. Epub 22 May 2006.
- Hammerschlag C, Silverman H. Healing Ceremonies: Creating Personal Rituals for Spiritual, Emotional, Physical and Mental Health. Berkeley, CA: Perigee Books; 1997:3.
- Amanzio M, Pollo A, Maggi G, Benedetti F. Response variability to analgesics: a role for non-specific activation of endogenous opioids. *Pain.* 2001;90:205-215.
- Moseley JB, O'Malley K, Petersen NJ, et al. A controlled trial of arthroscopic surgery for osteoarthritis of the knee. N Engl J Med. 2002;347:81-88.
- Dimond EG, Kittle CF, Crockett JE. Comparison of internal mammary artery ligation and sham operation for angina pectoris. *Am J Cardiol.* 1960;5:483-486.
- 14. Olanow CW, Goetz CG, Kordower JH, et al. A double-blind controlled trial of bilateral fetal nigral transplantation in Parkinson's disease. *Ann Neurol.* 2003;54:403-414.
- Frank JD, Frank JB. Persuasion and Healing: a Comparative Study of Psychotherapy. 3rd ed. Baltimore, Md: Johns Hopkins University Press; 1991.
- Frank JD. Psychotherapy-the transformation of meanings: discussion paper. J R Soc Med. 1986;79:341-346.
- 17. Frank JD. Psychological factors in illness and healing. *Med Times*. 1976;104:114-121.
- Rakel DP, Jonas W. Optimal healing environments. In: Rakel DP, ed. *Integrative Medicine*. 2nd ed. Philadelphia, Pa: W.B. Saunders; 2007.
- 19. Hypericum Depression Trial Study Group. Effect of Hypericum perforatum (St John's wort) in major depressive disorder: a randomized controlled trial. *JAMA*. 2002;287:1807-1814.

- Kirsch I, Moore TJ, Scoboria A, Nicholls SS. The emperor's new drugs: an analysis of antidepressant medication data submitted to the U.S. Food and Drug Administration. *Prev Treat.* 2002;5(23). Available from: http://journals.apa.org/prevention/volume5/ pre0050023a.html. Accessed January 2, 2006.
- McKay KM, Imel ZE, Wampold BE. Psychiatrist effects in the psychopharmacological treatment of depression. J Affect Disord. 2006; 92:287-290.
- Wampold BE, Brown GS. Estimating variability in outcomes attributable to therapists: a naturalistic study of outcomes in managed care. J Consult Clin Psychol. 2005;73:914-923.
- 23. Dossey L. Compassion. Explore (NY). 2007;3:1-5.
- Achterberg J, Cooke K, Richards R, et al. Evidence for correlations between distant intentionality and brain function in recipients: a functional magnetic resonance imaging analysis. *J Altern Complement Med.* 2005;11:965-971.
- Moerman D, Jonas W. Deconstructing the placebo effect and finding the meaning response. *Ann Intern Med.* 2002;136:471-476.
- 26. Lyons AS, Petrucelli RJ. *Medicine, An Illustrated History*. New York, NY: Harry N. Abrams; 1987.
- Cooper-Marus C. Gardens and health. In: *Design and Health-The Therapeutic Benefits of Design*. Stockholm, Sweden: Karolinska Institute; 2000:461-471.
- Janzen JA, Silvius J, Jacobs S, Slaughter S, Dalziel W, Drummond N. What is a health expectation? Developing a pragmatic conceptual model from psychological theory. *Health Expect.* 2006;9:37-48.
- 29. Epstein RM. Mindful practice. JAMA. 1999;282:833-839.
- 30. Egnew TR. The meaning of healing: transcending suffering. Ann Fam Med. 2005;3:255-262.
- Tonelli MR. The philosophical limits of evidence-based medicine. *Acad Med.* 1998;73:1234-1240.
- 32. Tresolini C, Pew-Fetzer Task Force. *Health Professions Education and Relationship-Centered Care: Report of the Pew-Fetzer Task Force on Advancing Psychosocial Health Education.* San Francisco, Calif: Pew Health Communications; 1994.
- Fox SG, Strum CA, Walters HA. Perceptions of therapist disclosure of previous experience as a client. J Clin Psychol. 1984;40:496-498.
- Berry DS, Pennebaker JW. Nonverbal and verbal emotional expression and health. *Psychother Psychosom.* 1993;59:11-19.
- Smyth JM, Stone AA, Hurewitz A, Kaell A. Effects of writing about stressful experiences on symptom reduction in patients with asthma or rheumatoid arthritis. *JAMA*. 1999;281: 1304-1309.
- 36. Banburey CL. Wounds heal more quickly if patients are relieved of stress: a review of research by Susanne Scott and colleagues from King's College, London. Presented at the Annual Conference of the British Psychological Society. *BMJ*. 2003;327:522.
- Thomas KB. General practice consultations: is there any point in being positive? Br Med J (Clin Res Ed). 1987;294:1200-1202.
- Breier A, Albus M, Pickar D, Zahn TP, Wolkowitz OM, Paul SM. Controllable and uncontrollable stress in humans: alterations in

mood and neuroendocrine and psychophysiological function. *Am J Psychiatry*. 1987;144:1419-1425.

- Chipperfield JG, Greenslade L. Perceived control as a buffer in the use of health care services. *J Gerontol B Psychol Sci Soc Sci.* 1999;54(3): P146-P154.
- 40. Menec VH, Chipperfield JG. The interactive effect of perceived control and functional status on health and mortality among youngold and old-old adults. *J Gerontol B Psychol Sci Soc Sci.* 1997;52:P118-P126.
- 41. Rowe JL, Montgomery GH, Duberstein PR, Bovbjerg DH. Health locus of control and perceived risk for breast cancer in healthy women. *Behav Med.* 2005;31:33-40.
- 42. Langer EJ. The Psychology of Control. Beverly Hills, Calif: Sage; 1983.
- Waters D, Sierpina VS. Goal-directed health care and the chronic pain patient: a new vision of the healing encounter. *Pain Physician*. 2006; 9:353-360.
- 44. Starfield B. Primary care and health. A cross-national comparison. *JAMA*. 1991;266:2268-2271.
- 45. Starfield B, Lemke KW, Herbert R, Pavlovich WD, Anderson G. Comorbidity and the use of primary care and specialist care in the elderly. *Ann Fam Med.* 2005;3:215-222.
- 46. Flint S. The Impact of Continuity of Care on the Utilization and Cost of Pediatric Care in a Medicaid Population [dissertation]. Chicago, Ill: University of Chicago; 1987.
- Gill J, Mainous A. The role of provider continuity in preventing hospitalizations. *Arch Fam Med.* 1998;7:352-357.
- Epstein RM, Franks P, Shields CG, et al. Patient-centered communication and diagnostic testing. *Ann Fam Med.* 2005;3:415-421.
- 49. De Maeseneer JM, De Prins L, Gosset C, Heyerick J. Provider continuity in family medicine: does it make a difference for total health care costs? *Ann Fam Med.* 2003;1:144-148.
- 50. Mead N, Bower P. Patient-centeredness: a conceptual framework and review of the empirical literature. *Soc Sci Med.* 2000;51:1087-1110.
- 51. McWhinney IR. Why we need a new clinical method. In: Stewart M, Brown JB, Weston WW, McWhinney IR, McWilliam CL, Freeman TR. eds. *Patient-centered Medicine: Transforming the Clinical Method.* Thousand Oaks, Calif: Sage Publications; 1995:1-18.
- 52. Fairhurst K, May C. What general practitioners find satisfying in their work: implications for health care system reform. *Ann Fam Med.* 2006; 4:500-505.
- 53. Adams, D. Doctors, Patients Give each other Mixed Reviews. American Medical News. 2007; 50(4):1-2. Available at: http://www. consumerreports.org/cro/cu-press-room/pressroom/archive/2007/ 02/0702_eng0702sur.htm?resultPageIndex=1&resultIndex=1search Term=doctors.
- Martin JC, Avant RF, Bowman MA, et al. Future of Family Medicine Project Leadership Committee. The future of family medicine: a collaborative project of the family medicine community. *Ann Fam Med.* 2004;2(suppl 1):S3-S32.