Social Support and Health: Benefits with Friends?
Matthew Pantell, MS4
UC Berkeley – UCSF Joint Medical Program
Santa Rosa Family Medicine Residency Talk, 8/13/12

Case
Two patients:
Both 60 year-old men with history of obesity, hypertension, and CHF. Come in for check-ups. Both take their medication “90% of the time.” Both exercise three times a week. No hx of depression.

Pt. A
- Lives with partner
- Group activities once a month
- Sees friends once a week
- Feels supported

Pt. B
- Lives alone
- Belongs to no group
- Sees kids/friends once a month
- “I could use more emotional support”

Does this change your level of concern?

Outline
- Brief History of the Social Determinants of Health
- Background on Social Support
- Social Support and Mortality
- Social Support and Morbidity
- Social Support vs. Traditional Risk Factors
- Potential Mechanisms
- Implications

History of Social Determinants of Health

John Cassel
- Epidemiologist, UNC
- Wade Hampton Frost Lecture, 1977
- Social environment → susceptibility to illness
- Improving social relationships as intervention

George Engel
- Psychiatrist, University of Rochester
- Biopsychosocial model of medicine
Michael Marmot

- Epidemiologist, University College London (trained at UC Berkeley)
- Whitehall Study, 1978
- Social gradient in health

Social Gradients in Health

- Social gradients are well-established
- Social factors: Education, income, neighborhood
- Outcomes: Mortality, morbidity, biomarkers

Social Support Definitions

- Social Support
  - Resources provided by other people
  - Information leading a person to believe she/he is cared for
  - Feeling of belonging or value
- Social Networks/Integration
  - Frequency of contacts
  - Number of contacts
  - Density of network
- Social Isolation
  - Lack of aforementioned factors

Emile Durkheim

- French sociologist
- “Le Suicide” - 1897
- Isolated individual → suicide risk

Theories of Social Support

Direct Effects

Stress

Support

Health

Stress-Buffering

Stress

Support

Health
Social Support and Mortality

Social Isolation is Associated with Increased Risk of All-Cause Mortality

Risk Remain After Adjustment for Covariates, Although Attenuated
Functional Decline

Loneliness in Older Persons: A Predictor of Functional Decline and Death
Carla W. Persky-Moore, M.D., M.P.H.; Irene J. Vinyard, M.D.; Wendy L. Kramer; M.D., M.P.H.

Table 1: Incidence of Reduction in Carmia or New Low Scores

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
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<tbody>
<tr>
<td>Age</td>
<td>75</td>
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<tr>
<td>Sex</td>
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Pain Intensity

Perceived Social Support and Coping Responses Are Independent Variables Explaining Pain Adjustment Among Chronic Pain Patients
Alcira E. Lopez-Martinez, Rosa Esteban-Cascado, and Carmen Sanchez-Masuret
Department of Psychiatry, Universidad Complutense, Madrid, Spain.

Table 1: Initial Model: Standardized Coefficients

<table>
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<th>Variable</th>
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<td>Total support</td>
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Risk of Falls

Age-adjusted annual fall rates by quartiles of social integration scores. ***p(trend) =.001; **p(trend) =.01; p (trend) ≤.05.
Social Isolation vs. Traditional Clinical Risks

Odds of Decreased Mortality by Risk Factor

Isolation vs. Traditional Risk Factors

Potential Mechanisms

- Less access to tangible resources (Cullen)
- Less promotion of healthy behaviors (Beckman & Glase)
- Less promotion of self-efficacy (Beckman & Glase)
- Upregulation of neuroendocrine activity (Herman & McEwen)
- Increased allostatic load (Beckman & Glase)
- Increased CRP (Ford et al.)
- Increased inflammatory gene expression (Cole et al.)

Altered levels of CRP

(Ford et al., 2006)
In the past year, could you have used more emotional support?
- A little / some / a lot

In Practice
- Risk monitoring
- Do you live with a partner? With anybody?
- Do you participate in a group activity?
- How often are you in contact with family/friends?
- In the past year, could you have used more emotional support?
- How much?
- A little / some / a lot

Summary
- Social isolation is a risk factor for many conditions
  - Mortality
  - All-cause
  - Cardiovascular
  - Respiratory
  - Infectious Disease
  - Functional decline
  - Pain
  - Poor quality of life
  - Fall risk

Social support is worth assessing
- Don't forget to take a social history!

Thanks for the Social Support!

Effects of Social Support on Medical Students’ Performances
KATHLEEN M. ROSSPENZA, MA, JANE HAUGHT, PHD, and JORDAN A. RICHMAN, PHD

Conclusion. The results suggest that contrary to the study’s hypotheses, social support in general is related to lower levels of academic performance for both men and women.
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