

COVID-19 - Social Isolation and Palliative Medicine

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The recent COVID-19 pandemic has raised an interesting concern in community-based palliative medicine (CBPM): What are the effects of social isolation (SI) on health and mortality? Shelter in-place orders and social distancing has put an at-risk population for infection at greater risk for the problems associated with social isolation. Many assisted living, board and care, skilled or custodial nursing homes or simply families trying to protect their loved ones or themselves have isolated from their normal life activities and interactions. Unfortunately, this may lead to other health problems, raising as always, ethical questions of risk and benefit and how we may improve future care and service.

An article published in 2013 (Pantell, et al) looked at the relative risk of mortality related to socially integrated versus socially isolated persons. Data was collected from NHANES involving 16,849 patients. The mortality hazards ratio for SI was nearly as poor as smokers and worse than obesity, hypertension and hypercholesterolemia: SI HR=1.62 for men, smoking HR=1.72 and for women SI HR=1.75 and smoking HR=1.86. A meta-analysis published in 2010 (Holt-Lundstad, et al) of 148 studies involving 308,849 patients showed an OR of 1.50 for survival if the patient has a strong socially integrated network. This study controlled for age, sex, underlying health issues and cause of death. Multiple articles have supported these results. (See references)

Other research has shown an associated with worse outcomes for individual conditions such as heart disease and diabetes. (Zhang 2007) (Eng 2002) Dr Eng found a HR of 1.82 for cardiac events in socially isolated men. Also cited was a 29% decrease in all-cause mortality for each categorical increase in close friends. Mortality decreased by 41% in moderately supported diabetics and 55% in the well supported cohort.

There is no current single definition of social isolation unfortunately. However, research trends include 4 general areas: secular activities, religious activities, friends – particularly close friends and family. In general, 0 to 1 areas of integration are considered poor integration, 2 to 3 areas moderate integration and all 4 areas as well integrated. As well, increased activity in any area has been associated with decreased morbidity and mortality.

It is worth noting that SI is an independent risk factor from loneliness (Steptoe 2013) and depression (Horsten 2000). Living alone is not considered social isolation either.

The CBPM community has recognized the importance of social isolation and [Social Network Index](#) scoring has been integrated into their programs: Sharp HealthCare's CBPM – Transitions program for example. It would benefit the entire healthcare industry to be aware of this concern. Many actions can improve social integration for the patient. These may include structured video visits with family and friends. On-line video conferencing can support religious and other group activities. As well, the integration of physical visits after appropriate time or screening may enable limited in-person visits from family and close friends. This author advises his patients planning to retire by being sure that they stay engaged in life and maintain a life purpose.

Future question will need to answer how long it takes before the harm from SI is irreversible; are there alternatives to the human to human contact which improves our health and quality of life? And are their ethnic and sex related differences in social needs?

In the meantime, it should not be assumed that the processes of sheltering at home, social distancing and social isolation are risk free. Human to human contact defines us and societies. Let us hope we can get back to comprehensive social integration soon and learn from this experience for future health care.

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