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Social and Emotional Support and its Implication for Health

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Abstract

PURPOSE OF REVIEW—To summarize recent research findings from selected publications focusing on links between social support and physical health.

RECENT FINDINGS—Current research is extending our understanding of social support's influences on health. Many epidemiological studies have concentrated on further linking measures of social support to physical health outcomes. A few studies are now moving into newer areas, such as emphasizing health links to support receipt and provision. Researchers are also interested in outlining relevant pathways, including potential biological (i.e., inflammation) and behavioral (i.e., health behaviors) mechanisms. Interventions attempting to apply basic research on the positive effects of social support are also widespread. Although the longer-term effects of such interventions on physical health remain to be determined, such interventions show promise in influencing the quality of life in many chronic disease populations.

SUMMARY—Recent findings often show a robust relationship in which social and emotional support from others can be protective for health. However, the next generation of studies must explain why this relationship exists and the specificity of such links. This research is in its infancy but will be crucial in order to better tailor support interventions that can impact on physical health outcomes.

Keywords

social support; emotional support; physical health; well being

INTRODUCTION

During the last 30 years, researchers have shown great interest in the phenomena of social support, particularly in the context of health. Prior work has found that those with high quality or quantity of social networks have a decreased risk of mortality in comparison to those who have low quantity or quality of social relationships, even after statistically controlling for baseline health status¹. In fact, social isolation itself was identified as an independent major risk factor for all-cause mortality². Current research has focused on expanding several areas of knowledge in this area. These include (1) social support influences on morbidity, mortality, and quality of life in chronic disease populations, (2) understanding the mechanisms responsible for such associations, and (3) how we might apply such findings to design relevant interventions.

It is important to note that social support in these studies is operationalized in several different ways. Most broadly, support can be conceptualized in terms of the structural components (e.g. social integration: being a part of different networks and participating socially³) and the functional components (e.g. different types of transactions between individuals, such as

emotional support or favors⁴). How the functional components are measured often varies between studies; transactions may be summarized by actual support received (often ascertained by asking the support providers⁵), perceived support received or available⁶, or the discrepancy between perceived support and received support⁷. Support is often further broken into different types— for instance instrumental support and emotional support—as often people have preferences for different types of aid depending on the circumstances. This diversity of ways in which support is defined is important and can provide greater specificity (context) to research findings.

MORBIDITY AND MORTALITY STUDIES

An important line of research in this area centers on extending our understanding of links between social support in its various forms and morbidity and mortality. For instance, social integration has been shown to affect mortality from diseases such as diabetes,⁸ while belonging support (characterized by interaction with friends, family, and other groups) was a consistent predictor of self-reported disease outcomes (included diabetes, hypertension, arthritis and emphysema) in an elderly population⁹. Most research in this area, however, has focused on links between structural aspects of support and cardiovascular disease outcomes. In one longitudinal study, social participation was shown to predict incidence of first-time acute myocardial infarction (MI), even after adjusting for demographic and health variables. In this study, those who had lower social involvement were 1.5 times more likely to have a first MI¹⁰. Other studies also found support for social integration's protective effect on MI morbidity, though the relationship of integration and all-cause mortality was not significant³. These researchers found that those with moderate or low social integration were almost twice as likely to be readmitted to the hospital post-MI than those with high social integration. In fact, social integration showed a positive dose-response association that was equivalent to other known predictors of re-hospitalization³. Another study also showed an association between integration (conceptualized by living alone) and mortality after hospital release post-MI even after controlling for basic health and clinical care variables¹¹. There was also an interaction with gender in that men who lived alone were at the greatest risk.

Beyond cardiovascular disease, other studies have taken a less structural approach and focused on perceived and received support, particularly emotional support. One such population survey showed that for elderly women, low perceived emotional support predicted higher mortality controlling for baseline demographics and health⁶. In addition, larger discrepancies between perceived and received support was found to predict mortality in dialysis patients⁷. These studies suggest that emotional support, in addition to structural aspects of support, may reduce mortality.

Although these results are consistent with a large prior body of epidemiological research, there have been some studies that have shown inconsistent associations. In the context of breast cancer survival, higher perceived support availability in tandem with low anxiety, what would appear to be a positive state, actually predicted higher mortality¹². The authors suggest that this may be due to patients restricting negative emotions. Additionally, in one prospective study social support did not explain risk of stroke beyond established risk factors¹³. However, support was not a major focus of this study and was assessed only at work. This is important as prior studies suggest familial sources of support have stronger associations to health outcomes¹⁴.

One interesting trend to emerge recently is the importance of being a support provider on health and well-being¹⁵. For instance, one study found that feelings of social usefulness in the elderly predicted lower disability and mortality¹⁶. Similarly, a study on church-based support showed that providing support, not receiving it, reduced the effects of one's financial strain on mortality¹⁷. These findings are consistent with a recent ambulatory study⁴ that showed giving

support was related to lower systolic and diastolic blood pressure. Interestingly, those who reported giving more support also reported getting more support. The authors postulate that giving and receiving support have unique pathways to stress: giving is mediated by increased efficacy, leading to lower stress, while receiving support has a direct effect on stress. Taken together, studies such as these suggest that there is something potentially unique about giving support. It may be that people experience positive affect while helping others, which may improve their health¹⁸, or it may suggest that it is in the context of a high-quality relationship in which one feels valued and can reciprocate by providing support that benefits occur. Future research will be needed to examine these intriguing findings in the recent literature.

FOCUS ON POTENTIAL PATHWAYS

More recently, researchers have also been working on elucidating the potential mechanisms that might explain how social support can influence such noteworthy health outcomes. One area of particular interest is related to biological mechanisms, especially inflammatory processes¹⁹. However, research on such outcomes has thus far produced inconsistent findings. Researchers in the Framingham Heart Study attempted to correlate social integration with serum markers of inflammation (i.e., monocyte chemo-attractant protein-1, C-reactive proteins (CRP), IL-6, soluble intercellular adhesion molecule-1)²⁰. Controlling for age and potential confounders (some of which may be mechanisms such as health behaviors, see below), only IL-6 was found to be inversely associated with social integration in men. An association with IL-6 was not shown in a study of pregnant mothers, although CRP levels were lower as a function of support during the third trimester of pregnancy²¹. Another study found that aspects of social support predicted lower stimulated levels of IL-8, IL-6, and TNF-alpha. However, statistically controlling for standard risk factors (including health behaviors), showed that only the link between support and IL-8 was still significant²². Finally, the Chicago Health, Aging, and Social Relations Study did not find a link between perceived support and CRP levels while statistically controlling for demographics and health behaviors²³.

The inconsistencies in these findings may be due to a variety of issues including sample demographics (ranging from young pregnant women to a mixed sample of the very old), the different types of support measures (ranging from structural measures to functional measures), or the differences in power within studies (N's ranging from 17 to >3000). The study with the most consistent evidence that social support predicts inflammation had the largest sample of older adults²⁰. This study had the most statistical power and is consistent with data indicating that psychosocial influences on immune function may be more apparent in older individuals²⁴. Additionally, this is a newer area of research and cytokines often have complex effects on the regulation of inflammation. Recent research aimed at examining links between social support and fMRI activation of specific brain regions that may orchestrate these biological responses may also help clarify these results²⁵.

A second potential pathway of interest relates to the influence of social support on health behaviors²⁶. Although many prior studies treat such health behaviors as confounds (see above), recent models of support emphasize its potential role as mechanisms¹⁹. For instance, support can be seen as an encouragement to engage in health behaviors. Conversely, the lack of support or isolation can become a barrier to health behavior adherence or adherence more generally, as was reported in a qualitative study of cancer survivors²⁷ and HIV patients²⁸. Social support is also related to broader types of health behavior, including fruit and vegetable consumption, exercising²⁹, and smoking cessation³⁰. This beneficial support may also come in a health context, such as one's physician, as those who viewed the patient-provider bond as one characterized by collaboration, liking and trust were more likely to adhere to treatment for various long-term medical issues³¹.

In addition to social support's positive influence on health behaviors and adherence, better relationship quality also has been shown to have a positive effect on long-term married couples' health promotion behaviors³². These data suggest that the dyadic context may be an important area that needs additional emphasis in future work. Furthermore, one study contrasted partner support (aiding and reinforcing a partner's own efforts) with partner control behaviors (inducing change in one's partner). Results showed that supportive behaviors predicted better mental health, while control behaviors predicted worse mental health and health behavior in their partners⁵. Consistent with social control models, these data suggest that effective support may need to act as a more gentle guiding force that will motivate behavioral change for the better.

INTERVENTIONS

As we learn more about the effectiveness of social support in affecting health outcomes, it becomes appealing to use this information to directly help clinical populations. This may explain why the largest proportion of recent research in social support and health involved interventions, with many focused on chronic disease populations such as cancer patients.

There are different types of interventions being implemented, many of which include elements of education and understanding, such as within a context of a support group. Support groups may be particularly useful because of the gaps they may fill in the support needs of patients and the experiential similarity within the group. For instance, one qualitative study in cancer support groups identified the unique role of such groups to be sources of available community, information, and acceptance; in contrast to waning support from overburdened family and friends. Additionally, these are situations in which patients can offer support to others and patients report that belonging to these groups provided an element of support that augmented other-network support³³.

In addition to support groups, some interventions focus on teaching general psychosocial skills and capitalizing on support within existing networks (e.g., cognitive behavioral therapy). In one study, caregivers of AD patients were enrolled in a randomized intervention trial designed, in part, to teach support seeking skills. In comparison to a usual-care control group, those who were in the treatment group were better at fostering their emotional ties and were more satisfied with support³⁴. This type of intervention has also been shown to work in child patient populations. For instance, children with cystic fibrosis were involved in a randomized intervention trial that educated the children about their disease and taught them relevant social skills. Those in the treatment group improved their quality of life and peer relationships, and decreased their loneliness and the perceived impact of the disease³⁵. These findings are especially important due to the potential isolation faced by children in some chronic disease contexts. In another intervention, Type 2 diabetes patients improved their use of social resources and social integration (though perceived support did not change) compared to usual care³⁶. Moreover, such changes mediated effects on physical activity, percentage of calories from fat, and blood glucose levels. It should be noted, however, that the use of such general or complex interventions, although successful in altering risk factors^{37,38}, does not allow us to conclude which specific component may have been driving the beneficial outcomes.

Of course, the practicality and cost-effectiveness of an intervention are also important to consider. Recent research is examining these issues by focusing on telephone and internet-based support interventions. Although no physical health outcomes were measured, one study found that an education and coping intervention over the phone for patients awaiting lung-transplant increased quality of life and lowered depression³⁹. Additionally, using a randomized control design, other researchers⁴⁰ studied a telephone support group and found it to reduce depression in older caregivers compared to no-intervention control group caregivers. These

data suggest the potential usefulness of alternative support interventions which may be especially important for those with practical (e.g., transportation), physical (e.g., disability), or social (e.g., anxiety) barriers.

CONCLUSION

The literature on social support and health is robust and continues to be an active area of research. However, the next generation of studies must be able to explain the contexts and mechanisms for why such associations exist. Such research is in its infancy but is currently being fostered by increasing interdisciplinary perspectives on social support and health. We believe that such approaches will be crucial in order to better tailor primary or secondary support interventions that have beneficial influences on physical health outcomes.

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