

EDITORIAL

Social ties and health promotion: suggestions for population-based research

Our interactions with family, friends, neighbours and co-workers have pervasive effects on how we feel and function. Accordingly, a priority for health promotion is the strengthening of positive social ties. The anticipated benefits are better functioning individuals, families, neighbourhoods and work groups, and improved mental and physical health. Yet, there is a large gap between this ideal and knowledge about how to achieve it. Too little is known at present about the processes involved in the social ties/health connection, though research is proceeding on diverse fronts (Henderson, 1992; Rook, 1994; Okun and Keith, 1998). If disconnected research efforts could become more complementary and reinforcing, knowledge development might move forward at a faster pace.

Two research streams hold particular promise in this regard. One of these has its locus in epidemiology and focuses on *supportive* social ties as positive influences on health. The other has its locus in fields such as gerontology and psychology, and focuses on social *strain* as a negative influence on health and functioning. The case for better connecting these two is merely illustrative of the possibilities that may arise from better collaboration across fields. The integration of theory and knowledge bases from epidemiology, gerontology, physiology, psychology and psychiatry (among many other fields) figures prominently in efforts to construct theory about the basic nature of and motivation for attachment with others [see, e.g. (Baumeister and Leary, 1995)].

A large literature has now developed from epidemiological research on the negative relationship between social integration and perceived availability of social support, on the one hand, and morbidity and mortality, on the other (Berkman, 1985; Schwartz and Leppin, 1992; Cohen *et al.*, 1994). The general pattern of findings, captured well in Schwartz and Leppin's meta analysis of 80 studies with a total sample size of 60 939 and

110 effect sizes, is that there exists a meaningful negative statistical relationship between social integration/social support and morbidity/mortality. This observation is compelling given the remarkable heterogeneity in the ways that social integration and support have been conceptualized and measured, and the broad range of health status indicators that have been investigated.

Various pathways have been proposed to explain how supportive social ties exert influence on the physical and psychological health of individuals (Cassel, 1976; Wills, 1985; Cohen *et al.*, 1994). Members of one's social network can be sources of information to help one avoid stressful or high-risk situations. They can serve as positive behavioural role models. Social integration may increase feelings of self-esteem, self-identity and control over one's environment, leading to better health outcomes. Social ties can also subject an individual to social regulation and social controls, and define normative behaviour. Social ties can be sources both of tangible support (e.g. financial assistance) and emotional support (e.g. a confidant in a time of need). The perceived availability and adequacy of such support may be more important for one's psychological well-being than the amounts of support actually received. In times of acute stress (e.g. the death of a loved one), the resulting stress responses may be buffered to a degree by the actions of others, such as the providing of emotional support, companionship, sympathetic listening and practical support.

The terms 'may' and 'can' pepper the summary of possibilities just listed, with good reason. Cross-sectional studies are still predominant in the literature and longitudinal studies are extremely rare. Epidemiological studies almost never provide a level of detail needed to tease apart the sub-dimensions of social ties and illnesses that are of interest. Quantitative surveys are not often complemented by qualitative research to illuminate the human dynamics underlying the statistical associations. Social network theory, social exchange theory, equity theory and other theory formulations that could aid in the study of under-

lying processes are not very influential in epidemiology.

These shortcomings are of course not breaking news, the field is moving apace to address many of these issues and progress is gratifying. There is, however, one additional limiting feature in the epidemiological research arena that is receiving almost no attention. Much of the existing epidemiological research has been conducted under the assumption that the social ties/health relationship is dominated almost entirely by the positive effects of social ties (Rook, 1992). However, there is emerging evidence that chronic social strain emanating from one's social network may play a vital role in the social ties/health link, by causing distress that under unfavourable circumstances can cascade to serious disorder and illness. Fundamental to this hypothesis is the notion that social support and social strain are not merely two ends of the same continuum. Indeed, just as illness and wellness are now understood to be related yet distinct constructs, perceived social support and perceived social strain are distinct in the human experience. It is perfectly possible to experience strain caused by one element of a social network at the same time that support is received from another element. All other combinations are also plausible: low support/low strain, low support/high strain, etc.

Social strain as the term is used here follows Rook (Rook, 1990) and refers to processes through which actions by people in one's social network, intended and unintended, cause a person to experience adverse psychological or physiological reactions. Examples of these actions include making excessive demands, criticism, invading privacy, provoking conflict, meddling, social conflict, giving trite, ineffective or inappropriate support, and aversive contact and social control (Rook, 1990). Lazarus and Folkman's (Lazarus and Folkman, 1984) very influential transactional model of stress and coping includes an emphasis on how such social demands (daily hassles) can be a source of serious stress when associated levels of conflict, ambiguity or overload overtax the individual's resources. They draw on research on

stress, conflict and ambiguity, both within and between family and work roles, to illustrate how daily hassles may be of more importance as sources of stress than acute major life events such as divorce or retirement (Lazarus and Folkman, 1984). This is of more than passing interest in the present context. The few epidemiological studies that have included a focus on social stressors have been preoccupied with acute stressors only.

The sole focus on acute stressors is perhaps justified if the social strain phenomenon is trivial, with modest and quickly passing negative effects. That is indeed the likely scenario for people who experience the occasional, modest social strain that is an inevitable aspect of living among others (Rook, 1992). There are reasonable grounds, however, to hypothesize that social strain is not trivial when marked by high frequency of occurrence, long duration, high intensity, poor coping or the simultaneous presence of several straining relationships. A number of pathways have been suggested through which serious social stress may produce psychological disorder (Billings and Moos, 1985; Cohen, 1992), and the plausibility of a path from clinically significant disorder (e.g. depression) to somatic illness and mortality has at least some empirical support (Schwartz and Leppin, 1992).

Predictably perhaps, the loci of research on social strain and health are to be found in fields concerned primarily with the needs of people in vulnerable states. Prime among these is gerontology, naturally concerned with social stress associated with role shifts, changing network size and composition, dependency and care-giving in relationships, and dealing with serious illness, among other challenges (Stephens *et al.*, 1987; Rook, 1994; Pearlin and Skaff, 1996; Okun and Keith, 1998). Compared to the body of research on social support, however, little emphasis has been placed on social strain phenomena, even in arenas such as gerontology. What does seem apparent from the modest literature now available from research with highly select samples is that negative social exchanges are predictably associated with distress and poorer emotional health (Rook, 1992; Stephens *et al.*, 1987). There appear to be no population-

based studies, however, to illuminate patterns and prevalences of social strain in communities at large, and associations, if any, with negative affect, depressive symptoms, psychosomatic/somatic complaints and diseases, among other public health concerns.

The present purpose, then, is to urge public health, and epidemiology in particular, to include social strain along side social support (and their interactions) in future investigations of the social ties/health link. The relevance of social strain to community health is suggested on a broad theoretical and empirical basis, several aspects of which have been touched on above. To move forward briskly and productively, the research called for must be theory-grounded. This presents a serious challenge. Highly practical fields such as epidemiology and gerontology are not especially preoccupied with basic theory building and testing. However, good starting points exist in theory readily accessible from sociology and psychology.

Social psychology (both the sociological and the psychological variants) has been long concerned with the nature of interpersonal relationships and how they affect individuals' functioning. Other arenas in psychology, sociology and other disciplines undoubtedly have contributions to make. Concluding here, a few illustrations are offered of how existing theory could guide the development of social strain constructs, that in turn could guide the development of social strain measures suitable for epidemiological studies. Six theory-derived social strain situations (constructs) are described that could be seriously distressful to average people, not otherwise especially vulnerable because of frailty, acute stress, serious physical illness and the like. These situations are labeled 'helpless bystander', 'inept support', 'performance demand', 'role conflict', 'social conflict' and 'criticism'.

The *Helpless Bystander* situation describes the plight of a person (P) that is aware of a serious problem in the life of a significant other (O). P desires to assist O but is unable to do so, does not know how to assist or feels unwelcome to assist. In other words, P wishes to engage in prosocial (helping) behaviour, but cannot. There are diver-

gent views on why people are motivated to help others that are in trouble. Social exchange theory (Thibaut and Kelley, 1959; Homans, 1961) reasons that helping others is rewarding because it relieves the personal distress of an observer, a view that rejects explicitly altruism (Dovidio *et al.*, 1991; Eisenberg and Fabes, 1991). Altruism is, nevertheless, also advanced as an explanation for prosocial behaviour, based on the idea that the human emotion of empathy causes observers to feel others' suffering and thus motivates the observer to help even at cost to themselves, i.e. no reward (Batson, 1991). Yet a third viewpoint, that of sociobiology, holds that helping behaviours among members of a group is adaptive to group survival and thus favoured by natural selection (Rushton, 1989). Common to all three understandings of prosocial behaviour is this: for most people, it is stressful to be in the presence of suffering and not be able to assist, all the more so when there is a significant bond between the observer and the sufferer.

In the *Inept Support* situation, O makes genuine support attempts that fail P, as can happen, for example, when friends or family of a seriously ill person minimize the seriousness of the medical situation (Wortman and Lehman, 1985). At the other extreme, supporters are sometimes over-protective (Lehman and Hemphill, 1990). Inept support can also result out of good-willed support attempts that unintentionally create a stressful obligation for reciprocity, or expose people to disappointments, conflicts, tensions or unpleasantness (Rook, 1984; Sandler and Berrera, 1984; Schuster *et al.*, 1990). The social psychological foundations of many such situations are addressed in theories of social exchange and of equity (Thibaut and Kelley, 1959; Homans, 1961; Molm and Cook, 1995). Social exchange models emphasize that how people feel about a relationship depends on the costs and rewards involved, while equity models add that people strive for fairness in the distribution of costs and rewards. It is consistent with these models that people expect support attempts to be appropriate to the situations they find themselves in and react negatively when they perceive that they receive too much help, too

little help or the wrong help, even when O's motivations are the best.

The *Performance Demand* situation has its focus on the strain of achievement striving experienced by P when O sets seemingly too-high demands. Lazarus and Folkman's (Lazarus and Folkman, 1985) theory of stress emphasizes that social demands are stressful when they overload P's (perceived) resources. Karasek and Theorall's (Karasek and Theorall, 1990) theory emphasizes that when psychological demands are high and decision latitude is low, accumulated strain is to be expected.

The *Role Conflict* situation is that in which multiple roles (wife, mother, daughter, employee) are perceived to demand too much time and attention from P. This corresponds to the social demands construct in Lazarus and Folkman's (Lazarus and Folkman, 1984) stress and coping model, but differs from the performance demand dimension, above, in its emphasis on multiple roles as the stress factor, not on too low capacity to perform as expected (although P may nevertheless take blame for not being able to manage somehow). Other common terms that have approximately the same meaning are 'role overload' and 'role strain' (Lee, 1998). Although role conflict can affect anyone, it has been noted as one of the issues of central importance to women's health, as women tend to be carers at the same time they juggle paid and unpaid employment among other obligations.

The *Social Conflict* situation is suggested by balance theory (Heider, 1958) and theories of social exchange (Thibaut and Kelley, 1959; Homans, 1961; Alessio, 1990; Molm and Cook, 1995). Relationships in which personal regard between P and O's is not balanced, and relationships in which giving and taking is perceived as too uneven and favouring O's over P, may produce psychological strain when change in the base relationship is not a realistic option. An example of imbalance in personal regard is the situation of P who remarries, and whose teenage son and new husband cannot get along.

Finally, the *Criticism* situation includes a class of problematic social interactions in which specific

actions of O's are perceived as misdeeds that cause P psychological distress such as resentment, shame or sadness (Rook; 1992). This can range from the extreme of physical violence to actions and words that induce degradation, double binding, exploitation, isolation and punishment (Marshall, 1994). These acts are often performed by people in very close relationships, but such negative feelings and actions can be found also on the job, at school, in the neighbourhood, etc. (Wiseman and Duck, 1995).

It is of course normal that we find ourselves in these situations from time to time and we mostly cope adequately. However, as argued here, it stands to reason that if we must grapple with several such situations at once, or if the frequency, intensity or duration of social strain situations is severe, coping attempts may be inadequate and serious distress may result. If such distress leads to depression-like symptoms, psychosomatic complaints, withdrawal, chronic absenteeism, illness and other untoward outcomes, the consequences for the individual, the family and the community are obvious. It seems plausible also that social support might buffer people from the most serious effects of social strain, but all this is speculative because the population-based studies needed to simultaneously investigate social support, social strain and health have not been undertaken, or at least completed and reported in the literature. Modest research of the kind called for here is now underway in Norway. Given the potential importance of this research direction, it is to be hoped that others are stimulated to join the effort.

Finally, this is my first opportunity, and I take it gladly, to publicly thank Karen Rook of the University of California for her vision, intellectual leadership and determination to bring to the fore many of the issues addressed here.

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