

REVIEW

Social capital: a key factor in child health inequalities

T Waterston, G Alperstein, S Stewart Brown

Arch Dis Child 2004;**89**:456–459. doi: 10.1136/adc.2003.024422

The widening gap in health outcomes between rich and poor is particularly evident among children and social inequalities in health are therefore of great concern to readers of this journal. Reducing inequalities in health is an important component of UK health policy.

types of networks are described—bonding, bridging, and linking. Bonding occurs in relationships that people have with people like themselves. Bridging relationships are those with people who are not like themselves—for example, those from a different socioeconomic group or ethnic group. Linking refers to relationships people have with those who have power or influence.

Although there is some research to suggest that we would all be happier and healthier if we lived in a society with narrower income differentials,^{1,2} the obvious solution to this problem—redistributive fiscal policy—is still resisted by many Western governments. In these circumstances health policy tends to focus on ways of protecting the poor from the health damaging consequences of poverty. The possibility that local factors in communities may have a protective effect on health, providing a measure of immunity to poverty,^{3–5} makes social capital an important concept for paediatricians. Health for all Children 4⁶ proposes that that social capital is not just protective against the impact of poverty, but that it may be “as important a predictor of child health ... as absolute levels of wealth or poverty”.

As Coleman⁹ points out in his description of the diamond broking community in New York, close knit communities can be very excluding of others, so one person’s perspective of how a community functions may be very different from another’s. Social norms can bind a community so strongly that individuals who do not conform are, or consider themselves to be, ostracised, harassed, or marginalised. Furthermore, social support which is offered grudgingly or patronisingly may do more harm than good. Intimate relationships characterised by domestic violence, although often close are clearly not beneficial. It is reasonable to assume that to enhance health, relationships need to support the development and maintenance of trust, respect, reciprocity, cooperation, empathy, and acceptance of diversity.

UNDERSTANDING SOCIAL CAPITAL

Health for all Children 4⁶ defines social capital as “the social cohesion of a community, and the sense of belonging and the level of involvement in community affairs”. This definition adopts both a community focused and an individual perspective on social capital. The former is that preferred by Putnam,⁷ one of the originators of the concept:

“Social capital refers to the institutions, relationships and norms that shape the quality and quantity of a society’s social interactions. Increasing evidence shows that social cohesion is critical for societies to prosper economically and for development to be sustainable. Social capital is not just the sum of the institutions which underpin a society—it is the glue that holds them together.”

The Organisation of Economic Cooperation and Development (OECD)⁸ defines social capital as “networks, together with shared norms, values and understandings which facilitate cooperation within or among groups”. Social networks are considered to be a central element of social capital in both perspectives. Networks are dynamic and are maintained and expanded by social interactions and transactions. Three

HOW DOES ALL THIS RELATE TO CHILD HEALTH?

Let us consider two types of neighbourhoods. In the first, a socially cohesive neighbourhood, people talk to and trust their neighbours. They have plenty of local friends whom they can turn to when in difficulties and they often volunteer to babysit for each other. Local people are concerned about the local environment and its governance. They participate in voluntary and community activities and vote in local elections. Relationships even between strangers are warm and friendly. Children can play out quite safely and there is a feeling of safety in the area. Crime and vandalism rates are low. In the second, a socially non-cohesive neighbourhood, parents are afraid to let their children play out because of fear of strangers or crime, and there is a lack of friendship and trust between neighbours as people do not talk to one another. There are few community activities and racism and intolerance are rife. People feel powerless to influence their environment and do not vote in elections. Intuitively most would agree that the former neighbourhood would be more “healthy” for children than the latter.

Morrow¹⁰ has examined children’s experiences of their community to determine the relevance of the concept of social capital to them. In a qualitative study of secondary school pupils she found that friendships are critical to wellbeing.

See end of article for authors’ affiliations

Correspondence to:
Dr T Waterston, Dept of
Community Paediatrics,
Newcastle General
Hospital, Newcastle upon
Tyne NE4 6BE, UK; a.j.r.
waterston@ncl.ac.uk

Accepted
1 September 2003

For these children the local “community” was the school. The wider community seems of less direct relevance to children, though issues such as transport, play facilities, and attitudes of adults towards teenagers are influential. More research is needed on children’s own views of their communities.

CRITICISM OF THE CONCEPT OF SOCIAL CAPITAL

Social capital is an American concept and its relation with health has mainly been studied using US data on adult health. Recent research by the Health Education Authority and its successor the Health Development Agency^{3 10} has elucidated its relevance in the UK and has also provided a critique of some of the early writing by Putnam and others. The main elements of this critique are as follows:

- There is no firm agreement among researchers as to the exact components of social capital; UK data indicate that trust, perceived citizen power, and civic engagement may be more important than reciprocal help and support in enhancing health.
- In UK studies, the influence of social capital and social support on health, stress, and health behaviour appears weaker than the influence of socioeconomic factors.
- Gender and age issues have been overlooked, but UK data show them to be critical, with stress having a higher effect on women’s than men’s health.
- There may be political benefits for anti-welfare politicians in playing up the role of local as opposed to governmental solutions to ill health in poor communities.

These criticisms are important. They indicate that the social capital story still has to fully unfold. They make the point that initiatives to promote social capital are not a substitute for initiatives to redress income inequality. However they do not suggest that the intriguing phenomenon of social capital is of no value to those interested in child health.

MEASURING SOCIAL CAPITAL

Methods to measure social capital continue to evolve and include directly observing social interactions in community settings, counting civic associations and their membership,¹¹ and gathering statistics relating to participation in local elections and crime rates.^{11–13} Probably the commonest way in which social capital is measured, however, is by community questionnaire surveys. The social capital module of the UK General Household Survey,¹⁴ for example, includes: respondents’ views of the area in which they live, civic engagement, reciprocity and trust, social networks, and social support. The Australian Centre for Community Organisations and Management questionnaire,¹⁵ although using slightly different questions, covers very similar information: civic engagement (for example, participation in sports, unions, school groups, societies, church, elections, etc), trust and perceived safety (including people looking out for one another, community fairness, and social mistrust (people taking advantage of one another)), reciprocity (helpfulness to others), tolerance of diversity, and connections with family, friends, neighbourhood, and work. Individuals’ responses to questions can be aggregated to produce a measure of community social capital.¹⁶ The WHO Health and Behaviour survey¹⁷ of 11–15 year olds, includes questions about the ethos of the school and found that children who are socially integrated report better health than those who do not feel part of school life.¹⁸

WHAT IS THE RELATION BETWEEN SOCIAL CAPITAL AND HEALTH?

Aggregated individual data have been used to show that aspects of community social capital are determinants of both

perceived health¹⁶ and mortality¹⁹ in adults. Other studies have shown individuals’ reports of social networks and social support to predict health outcomes such as coronary heart disease,²⁰ cancer,²¹ and mortality.²² Although most of the studies on social capital and health relate to adults,^{12 13 16 19–22} there are some showing health effects in children. For example, in a study of a number of equally poor and disadvantaged neighbourhoods in Chicago between 1980 and 1986, the rates of child abuse were found to be two to three times higher in socially disorganised neighbourhoods and with a lack of social coherence, than socially cohesive neighbourhoods.⁴ Similar findings were reported from the western suburbs of Sydney, Australia.⁵ Rates of child abuse ranged from 8.1/1000 to 53/1000, and lower rates correlated with variables such as neighbourhood cohesion, high levels of trust, and high value placed on local friendships. Mortality from a number of causes, including infant mortality, have been shown to be strongly associated with perceptions of lack of helpfulness, lack of fairness, and social mistrust in a community.¹⁹ High levels of social capital predict developmental and behavioural scores in children in low income areas,²³ and low social capital increases the chances of dropping out of high school.⁷ Low social capital is associated with poverty and social deprivation, but most of these studies have adjusted for a variety of indicators of socioeconomic circumstances and shown an independent impact of social capital.

It has been suggested that high social capital is associated with good mental health,²⁴ but the evidence so far is controversial, though means are now available to test this hypothesis.²⁵

POSSIBLE MECHANISMS TO EXPLAIN THE INFLUENCE OF SOCIAL CAPITAL ON HEALTH

Some have proposed that the health effects of social capital could be explained by the promotion of the economy through networking and collaborative ventures (economic capital), and the development of skills and competencies (human capital) in the community or group with the effect of reducing poverty. Social capital may also represent a resource for further development of the community, in that new networks may be built on older networks using the social relationships, norms and values, trust, and information developed in them. At its simplest level however social capital can be seen as a description of supportive, respectful relationships between community members resulting in a civil society. Such relationships could have a direct effect on health by enhancing emotional wellbeing and by reducing the stress generated by day to day life events. We all feel better when people around us are nice to us. Destructive relationships—those characterised by misuse of power, suspiciousness, exclusion, and fear—appear to have a direct detrimental effect on a range of physiological processes, leading to susceptibility to a range of diseases.²⁶

Studies of UK data have shown that material living conditions and socioeconomic position were stronger predictors of adverse health than measures of social capital.³ The authors suggest that the association between poor general health and low social capital can largely be explained by the greater amount of stress experienced by women living in poor quality neighbourhoods; women’s chances of smoking consistently increases as social capital decreases.

CAN HEALTH SERVICES INFLUENCE SOCIAL CAPITAL?

Social capital impact is potentially important for all of society, but programmes to improve social capital have concentrated on poor communities. The belief that social capital can be improved by outside influences rests largely on experiential

Ways in which services may be successful in increasing social capital in a community (adapted from Productivity Commission,³⁴ box 4.1, p. 55)

- Provide services with opportunities for networking, e.g. through a health centre providing rooms for local self-help groups to meet
- Create opportunities (e.g. through local events or projects) for community networking and participation
- Enable local people to take control of projects and community functions
- Traffic management and urban design changes to create safe places for children to play, to encourage neighbourliness, and to facilitate "mingling" between social groups
- School size, governance, and curriculum changes; increases in the availability and scope of extra-curricular activities; and mandating community services for students

reporting from community development projects. Some of the latter evidence is, however, compelling²⁷ and has underpinned the development and implementation of a number of government initiatives, including Sure Start.²⁸ Similar initiatives in other parts of the world such as the Families First Initiative²⁹ and Schools as Community programmes in New South Wales (NSW), Australia,^{30, 31} and Community Access to Child Health (CATCH)³² in the USA have all aimed to improve social capital through community development. Factors dictating success in the NSW initiatives have included a focus on improving community trust through creating opportunities for community networking and participation in local events, involvement of, and eventual control by local people of specific initiatives. Creating opportunities for people to meet and share experiences in a safe environment can break down barriers of mistrust. Enabling people who would not otherwise do so to participate in community affairs and discover that they are able to make a difference is empowering. Strategies have been developed from the ground up, supported from the top by all local agencies and organisations, and have been based on community representation in planning and implementation. A study conducted in South Australia estimated that a 10% increase in community participation would result in a 2.4% decrease in violent and property crime.³³ The American Academy of Pediatrics' CATCH programme³² is designed to increase local involvement by paediatricians in their communities. The basis of CATCH is that paediatricians are highly respected and good leaders, and hence in a good position to initiate or support community health work.

Although there is still much research to be done in determining the extent to which social capital affects children's health, the best methods to improve social capital, and the mechanisms through which social capital improves health, these studies suggest that social capital needs to be on the agenda of programmes to improve children's health in disadvantaged communities.

ROLE OF PAEDIATRICIANS, HEALTH VISITORS, AND COMMUNITY HEALTH WORKERS IN IMPROVING SOCIAL CAPITAL

Paediatricians, GPs, and health visitors all have a potential role to play in the development of social capital, but if they are to engage in this way they will need to do so as a part of

What can paediatricians do to improve social capital?

- Become conversant with the literature on social capital and health and social outcomes
- Use that information to inform and advise on the development of programmes to enhance social capital
- Engage in multi-agency work in their local community, e.g. through Sure Start programmes
- Advocate for programmes to improve social capital and particularly for those that benefit children
- Set up or support programmes which enhance parent-child relationships
- Participate or play a leading role in the monitoring and evaluation of strategies to improve social capital and the health and social outcomes

broader multi-agency teams. In this context they can participate in developing strategies to improve social capital and assist in evaluating their efficacy. They can work with their patients and their parents in an empowering way³⁵ and they can support the development of parenting programmes. Well facilitated group based programmes have the effect of developing mutual support and connectedness between families in local communities.³⁶⁻⁴⁰ They also have a beneficial impact on antisocial behaviour and criminality,⁴¹⁻⁴³ and relationships with peers.⁴⁴ Antisocial behaviour and crime are important features of low social capital communities and children who have difficulty making relationships with peers in schools, tend to grow up to have problems with relationships,⁴⁵ and therefore be dogged by low social capital wherever they end up living. There are an increasing number of interventions that are effective in enhancing parent-child relationships. These initiatives need to be pursued in the context of antipoverty strategies.

Initiatives to enhance social capital are likely to fail if they are presented as an alternative to anti-poverty measures, but as an adjunct to the latter they have the potential to be beneficial. Indeed Richard Wilkinson has suggested¹ that equity in the distribution of income may go hand in hand with social capital. We propose that local community involvement be seen as a necessary and valuable area for clinical work and study by paediatricians.

Authors' affiliations

T Waterston, Dept of Community Paediatrics, Newcastle General Hospital, Newcastle upon Tyne, UK

G Alperstein, Central Sydney Area Health Service, Sydney, Australia

S Stewart Brown, Division of Health in the Community, Warwick Medical School, University of Warwick, UK

REFERENCES

- 1 **Wilkinson R.** *Unhealthy societies: the afflictions of inequality.* Routledge, 1996.
- 2 **Vagreo D, Lundeberg O.** Health inequalities in Britain and Sweden. *Lancet* 1989;ii:35-6.
- 3 **Cooper H, Arber S, Fee L, et al.** *The influence of social support and social capital on health. A review and analysis of British data.* Health Education Authority, 1999.
- 4 **Garbarino J, Kostelny K.** Child maltreatment as a community problem. *Child Abuse Negl* 1992;16:455-64.
- 5 **Vinson V, Baldry E.** The spatial clustering of child maltreatment: are micro-social environments involved? *Trends and issues in crime and criminal justice.* Canberra: Australian Institute of Criminology, June 1999:1-6.
- 6 **Elliman D, Hall D.** *Health for all children*, 4th edition. Oxford: Oxford University Press, 2003.
- 7 **Putnam RD.** *Bowling alone.* New York: Simon and Schuster, 2000.

- 8 **OECD**. *Human and social capital and sustained growth and development: reconciling new economies and societies: the role of human and social capital*. Paris, France: Directorate for Education, Employment and Labour and Social Affairs, 2000.
- 9 **Coleman J**. Social capital in the creation of human capital. *Am J Sociol* 1988;**94**(suppl):s95-s120.
- 10 **Morrow V**. Children's experience of community. In: Swann C, Morgan A, eds. *Social capital for health: insights from qualitative research*. London: Health Development Agency, 2002:11-30.
- 11 **Raudenbush SW**, Sampson RJ. Ecometrics: towards a science of ecological settings, with application to the systemic social observation of neighbourhoods. *Sociological Methodology* 1999;**29**:1-41.
- 12 **Bruhn JG**, Wolf S. *The Roseeto story*. Norman: University of Oklahoma Press, 1979.
- 13 **Putnam RD**, Leonardi R, Nanetti RY. *Making democracy work*. Princeton, NJ: Princeton University Press, 1995.
- 14 **Coulthard M**, Walker A, Moyan A. *Assessing people's perceptions of their neighbourhood and community involvement*. London: HDA, 2001.
- 15 **Bullen P**, Onxy J. *Measuring social capital in five communities in NSW: an analysis*. Centre for Australian Community Organisations and Management Working Paper Series (No. 41). Sydney: University of Technology, 1998.
- 16 **Hyppa MT**, Maki J. Individual-level relationships between social capital and self-rated health in a bilingual community. *Prev Med* 2001;**32**:148-55.
- 17 **World Health Organisation**. *The health of youth: a cross national survey*. WHO Regional Publications, European Series, No. 69. Geneva: WHO, 1996.
- 18 **Eder A**. Risk factor loneliness. On the interrelation between social integration, happiness and health in 11, 13 and 15 yr olds in 9 European countries. *Health Promotion* 1990;**5**:19-33.
- 19 **Kawachi I**, Kennedy BP, Lochner K, et al. Social capital, income equality and mortality. *Am J Public Health* 1997;**87**:1491-9.
- 20 **Orth Gomer K**, Rosengren A, Wilhelmsen L. Lack of social support and incidence of coronary heart disease in middle-aged Swedish men. *Psychosom Med* 1993;**55**:37-43.
- 21 **Reynolds P**, Kaplan GA. Social connections and risk for cancer: prospective evidence from the Alameda County study. *Behav Med* 1990;**16**:101-10.
- 22 **Hemingway H**, Marmot M. Evidence based cardiology: psychosocial factors in the aetiology and prognosis of coronary heart disease. Systematic review of prospective cohort studies. *BMJ* 1999;**318**:1460-7.
- 23 **Runyan DK**, Hunter WM, Socolar RS, et al. Children who prosper in unfavourable environments. *Pediatrics* 1998;**101**:12-18.
- 24 **Kawachi I**, Berkman F. Social ties and mental health. *J Urban Studies* 2001;**78**:458-67.
- 25 **Henderson S**, Whiteford H. Social capital and mental health. *Lancet* 2003;**362**:505-6.
- 26 **Brunner E**, Marmot M. Social organization and stress. In: Marmot M, Wilkinson RG, eds. *Social determinants of health*. Oxford: Oxford University Press, 2000.
- 27 **Wallerstein N**. Powerlessness, empowerment, and health: implications for health promotion programmes. *Behaviour Change* 1992;**6**:197-205.
- 28 **Eisenstadt N**. Sure Start: key principles and ethos. *Child Care Health Dev* 2002;**28**:3-4.
- 29 **Alperstein G**, Nossar V. Can the Families First Initiative contribute to reducing health inequalities? *NSW Public Health Bulletin* 2002;**13**:38-41.
- 30 **Wraith C**, Murphy E. Working together to support children and families in disadvantaged communities. *NSW Public Health Bulletin* 1998;**9**(11):131-3.
- 31 **Fletcher J**, Alperstein G. Connect Redfern: connecting the community. *New Doctor Summer* 1999/2000;**72**:11-15.
- 32 **Hutchins VL**, ed. Paediatricians' Involvement in Promoting Community Access to Child Health (CATCH). *Pediatrics* 1999;**103**(suppl):1369-432.
- 33 **Carcach C**, Huntley C. Community participation and regional crime. *Trends and issues in crime and criminal justice*. Canberra: Australian Institute of Criminology, April 2002:1-6.
- 34 **Productivity Commission**. *Social capital: reviewing the concept and its policy implications*, Research paper. Canberra: AusInfo, 2003.
- 35 **Stewart-Brown S**. Is the ethos of medical practice in community paediatrics compatible with that in public health. *Arch Dis Child* 2000;**83**:101-3.
- 36 **Barlow J**, Stewart-Brown S. understanding parenting programmes: parents views. *Primary Care Res Dev* 2001;**2**:117-30.
- 37 **Plugge E**, Stewart-Brown S. Parenting programmes and mental health promotion: a qualitative study of the impact of the Family Caring Trust parenting programme. In Press.
- 38 **Wolfe RB**. Listening to children: three studies toward developing evaluating and replicating a new approach to parent education, support and empowerment. Dissertation. USA: Northwestern University, 1997.
- 39 **Yuen TC**. Filial therapy with immigrant Chinese parents in Canada. Dissertation. USA: University of North Texas, 1997.
- 40 **Thomas EM**. Parental perceptions of the effective black parenting programme. Dissertation. USA: Waldern University, 2000.
- 41 **Barlow J**, Stewart-Brown S. Behaviour problems and group based parent education programmes. *Dev Behav Pediatr* 2000;**21**:356-70.
- 42 **Farrington DP**, Welsh BC. Family-based prevention of offending: a meta-analysis. *Aust N Z J Criminal*. Forthcoming.
- 43 **Dishion TJ**, French DC, Patterson GR. The development and ecology of antisocial behaviour. In Cicchetti D, Cohen DJ, eds. *Developmental psychopathology. Risk disorder and adaption*. New York: Wiley, 1995;**2**:421-71.
- 44 **Stoolmiller M**, Eddy JM, Reid JB. Detecting and describing preventative intervention effects in a universally school based randomised controlled trial. *J Consult Clin Psychol* 2000;**2**:269-306.
- 45 **Caspi A**, Silva PA. Temperamental qualities at age 3 predict personality traits in young adulthood: longitudinal evidence from a birth cohort. *Child Dev* 1995;**66**:486-98.