

“This Neighbourhood is Killing Us!” The Impact of Neighbourhood Conditions on the Health and Wellbeing of People Living in Deprived Neighbourhoods in Malta

Bernadine Satariano

bernadine.satariano@um.edu.mt

Abstract

A number of studies emphasise that the place of residence determines the health and wellbeing of its inhabitants. Although it is well known that similar to wealth, health varies across countries, few realise that the health and wellbeing of individuals also vary across local neighbourhoods. This qualitative study explores how the health and wellbeing of families living in deprived neighbourhood conditions in Malta are being affected due to the neighbourhood conditions.

Participant parents and children narrate feelings of stigma experienced because of where they live and due to the physical conditions of their neighbourhood environment. Apart from the impact on the inhabitants' self-esteem, the dilapidated neighbourhood environment reduces the possibility of enjoying social interaction with resourceful persons. This creates feelings of inequality and social exclusion which constrain these inhabitants from involving themselves in educational and cultural activities and thus inhibiting their wellbeing and the future success of their children. Moreover living in deprived neighbourhoods also puts the respondents at risk of ill-health and obesity due to the lack of adequately maintained open spaces for physical activity.

Keywords: neighbourhood, inequality, wellbeing, Malta

Introduction

Over the past decades researchers in various countries have thoroughly investigated how much the neighbourhood environment where we live relates to our health and wellbeing. Several studies found that people living in deprived neighbourhood environments are most likely to suffer ill-health and lack of wellbeing (Kearns, 1993; Curtis, 2004; Cummins et al., 2007; Satariano and Curtis, 2018). This study explores the experiences of families living in deprived Maltese neighbourhoods and how this deprived context impacts on their health and wellbeing.

An important aspect that considers the idea of interaction between people and place is how and why *context* and *composition* are important for people's health and wellbeing. The area of residence may have significant influences on health and wellbeing, over and above the effects of individual characteristics (Macintyre et al., 1993; Jones and Moon, 1993; Curtis, 2010; Gattrell and Elliot, 2015). If we observe differences in health population between places, these could be because of differences in the kind of people who live in these places (compositional explanation) or because of differences between the places (a contextual explanation). Who you are explains a lot of geographical variation in health outcomes, however there is also an effect of where you are. The composition of a geographically defined population results from the extent to which people with similar socio-economic status or educational level tend to congregate within certain areas, either because they share a common culture or because they are attracted to the area due to lack of personal resources, money or other (Harvey, 1973; De Koninck and Pampalon, 2007). Contextual attributes of places are connected to various aspects of the environment which affect the health of whole groups, over and above the contribution of aggregate individual characteristics (Duncan et al., 1993; Macintyre and Ellaway, 2000; Macintyre et al., 2002). Smith and Easterlow (2005) explain that there has been a period of neo-conservatism where the variations of health were interpreted as being due to personal lifestyles or individual behaviours. This was followed by a perspective that assigns responsibilities to governments and collectives, placing emphasis on the material conditions of place rather than on the people and their subcultural explanations. The idea that context matters for individual health is not new and has its roots in traditional medicine (Cummins et al., 2007), based on the argument that there are contextual processes operating at the scale of whole communities or geographical areas which are important for health and health inequalities (Macintyre et al., 1993). A number of studies have demonstrated the importance of contextual effects in relation to a range of health outcomes, including self-reported health (Cummins et al., 2005), mortality (Waitzman and Smith, 1998; Yen and Kaplan, 1998) and morbidity (Shouls et al., 1996; DiezRoux et al., 1997; Sundquist et al., 1999), and to health behaviours, such as smoking (Duncan et al., 1999; Frohlich et al., 2002). However most of the time 'contextual' factors may be more 'distal' in their effects on the health determinants which in turn influence individual health determinants and thus indirectly influence health thus seeming more predictive of health inequality.

A related strand of literature argues that relative inequality in the wealth of the community can also determine health and wellbeing. Wilkinson and Pickett (2009) in their study of the 'spirit level', present evidence that several developed countries are above the absolute poverty threshold but are also countries with unequal societies and therefore the inhabitants of these types of countries suffer worse health conditions than those who live in more equal countries. This shows that good health is not determined according to wealth but according to the level of

equality. In unequal societies, the relative social status exerts a significant impact on health through feelings of inferiority, anxiety, shame, and worthlessness, which can all lead to ill-health (Wilkinson, 1996). The theory suggests that social status and social affiliations are related to psychosocial risk factors that affect health outcomes, especially in developed countries where the general standard of living is such that most people are not exposed to ‘absolute’ poverty and extreme material deprivation (Wilkinson, 1999; Wilkinson and Pickett, 2006).

It is argued that in developed countries, although the average health of populations may have improved, the health of materially deprived groups has either improved at a much slower rate or in some cases it has even worsened (Hanlon et al., 2006). This underlines how health inequality is defined as *‘the differences found in various aspects of health between different groups in society’* (Blamey et al., 2002, p.5). Research in economically disadvantaged neighbourhoods has shown that there are various dimensions of socio-economic inequalities that are associated with health inequality and which contribute to vulnerability to health related problems such as: cardiovascular disease (Diez-Roux, 2001); asthma (Cagney and Browning, 2004); poor physical functioning (Feldman and Steptoe, 2004); tobacco consumption (Duncan et al., 1996); smoking initiation (Frohlich et al., 2002) and mortality risk (Martikainen et al., 2003; Wight et al., 2010). This work suggests that more deprived neighbourhoods are linked to worse ill-health outcomes (Twigg, 2014). Several researchers such as Wilson (1987), Furstenberg et al. (1999) and Judge et al. (2006), have demonstrated that social groups suffering from low levels of health are often clustered in certain localities and neighbourhoods which socially and geographically reinforce their isolation from resources. This argument suggests that inequality not only impinges on physical health and mortality but also on a range of inter-related socio-economic factors. Therefore poor health is related not only to material poverty (Ewles, 2005; WHO, 2008), but also to social class (Marmot and Brunner, 2005), education (Erikson, 2001; Suhrcke and de Paz Nieves, 2011), employment (Marmot and Wilkinson, 1999; Bartley et al., 2004), social networks (Putnam, 1995; Marmot and Wilkinson, 1999; Fowler and Christakis, 2008) and culture (Burch, 2008; WHO, 2009). The argument is that those who live in isolated and resource-deficient neighbourhoods for a long period of time are trapped by the accumulation of poverty and poverty associated behaviours across generations, creating an inter-generational transmission of poverty (Wilson, 1987).

Methodology

This study, through in-depth interviews, explores the lived experiences of families living in deprived neighbourhoods. The life stories of children and adolescents are included in this study as it was felt that their neighbourhood experience is important and valid as that of adults.

In order to address my research objectives, I have chosen three localities in Malta, identified by the national government as being mostly in need of the social services, as explained in the literature above showing that people who are suffering from poor health and lack of wellbeing are more concentrated in deprived areas (Congdon, 1996; Whitley et al., 1999; Curtis et al., 2000; Pampalon and Raymond, 2000; Martinez et al., 2003; Weich et al., 2003; Pampalon et al., 2008; Curtis et al., 2009). The residents living in these areas are more frequently dependent on social benefits when compared to inhabitants of other localities in Malta. Neighbourhoods deprived of economic and educational resources also tend to be deficient in health-promoting social resources.

A sample of ten families, comprising parents and their children, was chosen from each of the three study areas and the children in the family were between five and sixteen years. All the respondents are anonymised. Ethical approval was obtained from the University where the author was affiliated at the time of research. In order to recruit the sample, the author participated in local activities, so that trust could be gained. Permission for interviews was obtained from both the parents and the children, with written consent to conduct the interview. Due to the sensitivity of the topic, it was felt that the names of the neighbourhoods remain anonymous in order not to generate further stigma to the inhabitants of the neighbourhood thus protecting the identity of the informants. The narratives were transcribed, and an 'open coding' approach was used for the analysis of this study.

Analysis

In this study the neighbourhood environment is analysed in a dynamic manner and is highly dependent on the perception and experience of the respondents. The respondents of this study narrated a number of factors explaining why where they live may be putting their health and wellbeing at risk.

The participants first pointed out that they experience stigma since they reside in a deprived neighbourhood and that the perceptions of people living in other neighbourhoods are increasing their level of deprivation. Rodianne explains how this stigma on her neighbourhood community is generating feelings of inequality and is impacting negatively on her health and wellbeing and on that of her community. Rodianne explains that the media has contributed in giving a bad name to her locality as many times the media falsely reports that a person from her locality committed a crime. Yet in reality this person would not be from Rodianne's neighbourhood. Therefore according to Rodianne the media reports are shaming her neighbourhood. *When you tell people where you come from, you see them feeling astonished and taken aback. I am sure that many think that I might be a person of bad character. (Rodianne)*

Ruth further explains that the stigma on her neighbourhood locality is so great that it has affected her employability.

I applied with three cleaning companies and I am sure that two of them refused me because I live in this neighbourhood. Then I wrote my sister's address since she lives in another locality and they employed me immediately. It hurts because this means that people are chosen according to where they live and not according to who they really are!
(Ruth)

This therefore implies that people living in deprived neighbourhood communities are finding it more difficult to move out of poverty due to stigma. These feelings of inequality experienced by some of the residents are causing harm on their health and wellbeing.

Apart from the feelings of neighbourhood social stigma the respondents also explained feelings of low self-esteem due to the derelict neighbourhood environment. The physical features of the environment such as empty properties and graffiti have been known to relate to the prevalence of delinquency and vandalism. Several residents have commented on the fact that the walls of vacant dwellings are being abominably covered with graffiti. Monica commented that, *'Some corner buildings have really foul words written on them, some are written in large print...no one here seems to take the initiative to whitewash the wall. Having to read them every day is sickening.'* This too may have effects on the psychological health of the inhabitants. This points to the idea of the 'Broken windows' scenario where vandalism to property such as graffiti and broken windows create the idea that social incivility and disorders in the area is high and which results in a vicious cycle of spiralling degeneration (Kelling and Coles, 1996; Curtis, 2010). Moreover, Weich et al. (2002) link the number of graffiti in the neighbourhood with higher rates of depression and ill-health of the people living in the area.

Respondents in this study also complained about the lack of cleanliness they encounter in their neighbourhoods. Research states that those individuals who leave litter are more likely to do so in locations that are not well maintained and where litter has already been dropped (Cialdini et al., 1990, 1991; Keizer et al., 2008, 2013). Yet the respondents are more likely to find fault with the authorities rather than with fellow residents and in their narratives have accused the local council of never enforcing its cleanliness regulations against offenders. The residents' concern about this derelict image is also due to the fact that their locality is not reattracting people who are qualified and would help improve the image of their neighbourhood. Indeed, Pawlu explains *'Doctors, lawyers and professional people used to live here... but now everyone left. With this dilapidation who is attracted to live here? No one!'*

The dereliction in these deprived neighbourhoods is also impacting on the health and wellbeing of the adolescents and children. Jane's daughter explained that as

she attends a church school outside her neighbourhood and none of her friends are from her locality, she feels ashamed to ask her friends to visit her, not because her house is not up to standard but because her neighbourhood is dirty and neglected. This feeling was also expressed by Isaac, Luca and Shyesidin which clearly shows that the physical environment plays an important role on one's self-esteem.

I am afraid to tell my friends where I live because the pavements are dirty and broken, there is always a scent of rubbish and urine. I am afraid that the children would bully me when they see where I live!
(Raisa)

This matches with the findings of Fagg (2009) who stated that living in the most deprived Canadian neighbourhoods was significantly related to low self-esteem in boys. Moreover, the study of Haney (2007) found that the residents' perception of neighbourhood physical disorder is significantly related to self-esteem even more than the effect of living in poverty.

Apart from the adequate maintenance of the neighbourhood the teenage respondents from the deprived neighbourhoods are concerned about the lack of suitable open spaces where to meet friends and where to spend their free time. Moreover, since some of the streets are narrow and there is a lack of parking spaces, the few available open spaces are being taken up as parking lots.

Furthermore, Patricia compared their open public spaces with those of other towns and villages. They find that the latter have taken care to modernise and maintain their public spaces in good order while theirs are old, unsafe and drab.

In these playgrounds everything is broken, the swings are made of iron with scraped paint. How different other playgrounds are! Everything is made of plastic and they also have rubber mats so that the children cannot hurt themselves. There is space for them to run about. Here everything is old and shabby... there isn't even space where the children can run because it is so small! If there are ten children they have to queue up to go on a swing. That is why children end up fighting because it is so crowded! (Patricia)

The parents and children are disappointed that the only public gardens available are not suitable for children because they are not allowed to play with a ball or ride a bicycle. Some respondents argued that the central government is more concerned with improving and embellishing touristic sites than seeing to the needs of the local citizens, especially children.

They have just restored and landscaped the garden nearby, yet we cannot take the children to play there. (Patricia)

Jose argues,

'What do you expect me to do, a 13-year-old teenager, to play in a playground with two swings and a seesaw? There is nowhere to go

around here for children of our age!... So we can only ride the bicycle in the streets. I've been hit twice by a car while doing so!

Other research has highlighted unhealthy behaviours because of high levels of physical inactivity amongst disadvantaged socio-economic groups (Droomers et al., 2001; Giles-Corti and Donovan, 2002). These studies have explained that the socio-economic conditions of the neighbourhood influence physical activity amongst the residents. Similarly, Ruth explains that when her 14-year-old son was playing football in an alley nearby, he shattered a window pane and consequently sustained serious injuries with the result of losing the full function of his hand. This incident constrained Ruth to prevent her children from playing outside in the street again. She adds that due to the lack of public playgrounds, she had to buy a *Playstation* for her children so that they can spend their free time playing indoors and avoid the perils of the streets outside.

I had to spend quite a sum of money on the Playstation and I'm not happy about it because the children are becoming hyperactive, as they are not doing any physical exercise. (Ruth)

The parents of these children are not only unhappy about their children's lack of physical exercise but are also concerned that their children are not benefiting from the effects that sports can have on the character formation of their children.

I know that sport is important as it helps in the healthy development of our children. I know that sports can help them avoid drugs and other addictions. (Tracey)

As these youths have nowhere to go and play I am afraid that they start frequenting bars and lead disorderly lives. (Monica)

Therefore the lack of adequate open spaces in these neighbourhoods may lead to a chain of negative circumstances which ultimately affect the health of children and youths. The inability to practise sports because of lack of availability of open spaces, is leading to inactive and undisciplined youths, who are more prone to anti-social behaviour.

Apart from the impact of the social and physical neighbourhood conditions it also emerged that the neighbourhood environment impacts on the educational success of the children and adolescents living in these deprived neighbourhoods. From the interviewees' life experiences, it transpired that the value of education in some deprived neighbourhoods is so low that many parents wait anxiously for the time when their children can leave school to start work and earn some money. This mind-set is greatly undervaluing education and the opportunities that children are offered when they attend school.

In her narrations Ruth exhibits the traditional type of mentality that a woman's place is in the home bearing and rearing children. Ruth expresses doubts about her

daughter's ability to reach O' level standards in her education. It is not due to lack of potential on the part of the daughter but due to the culture which perceives post-secondary education as irrelevant for girls.

We are not that type! We are not the type of people who sit for O levels and obtain certificates. It is impossible for us, it is even unthinkable.
(Ruth, Charmaine's mother)

This is lowering Ruth's daughter, Charmaine's self-esteem, and limiting her determination to reach her goals and succeed. However, Charmaine explains that she uses all her resilience to go against the current and strives hard to obtain good exam results. She states that it is only with the help of the school counsellor and the subject teachers that she can defy the norms. Such gatekeepers, who can help her and guide her in her educational attainment, are seen to be few in her neighbourhood.

You see what annoys me about my neighbourhood. They discourage you, they never motivate you to continue your studies. I have no one in my family or in my neighbourhood who can direct me. I cannot ask my sister to tell me about O levels because she never sat for any O' levels. (Charmaine)

Young people, are experiencing a sense of helplessness and a lack of aspiration in life to the extent that Rose's son explains that he would feel guilty taking money from his mother to sit for the O' level exams when he assumes that he would not pass.

Taking money from my mother to pay for my O levels would be money down the drain. (Gilmor)

Conclusion

Similar to other international studies it clearly emerged that place is a determinant of health for deprived Maltese families and that living in such neighbourhood environment is likely to put the inhabitants at risk of ill-health and lack of wellbeing. The place with its physical and social processes that occur in the deprived neighbourhoods under study can develop a reputation which can in turn create a cycle of inequality and continue to put the residents of the neighbourhood at risk of ill-health and wellbeing.

It emerged that children's present wellbeing is being harmed due to the ill-maintained neighbourhood environment which is causing social exclusion. This may also limit the prospect of future educational and social mobility and thus success in life. Furthermore, not having attractive places where to play and be active may be causing harm to the physical health and putting children and adolescents at risk of illicit behaviour.

Thus the neighbourhood environment within a Maltese context can impose risks, social exclusion, feelings of stigma, feelings of inequality, and psychological stress and anxiety due to a lack of adequate investment in the social and physical environment of the neighbourhood.

This paper sheds light on the fact that the neighbourhood environment is an important determinant of health and wellbeing for Maltese families. Therefore, this research study calls for attention that context and place should be given due attention to future studies focusing on health, deprivation and social inequalities. Indeed, health and place in Malta ‘are inextricably inter-connected’ (Bambra, 2012) and consequently neighbourhoods in Malta can either create opportunities and resources or constrain healthy living.

References

- Bambra, C. (2012). Forward. In: S. Atkinson, S. Fuller, and J. Painter, (eds.) *Wellbeing and place*. Farnham, UK: Ashgate.
- Bartley, M., Sacker, A. and Clarke, P. (2004). Employment status, employment conditions, and limiting illness: prospective evidence from the British household panel survey 1991- 2001. *Journal of Epidemiology and Community Health*, 58, 501-506.
- Blamey, A., Hanlon, P., Judge, K. and Muirie, J. (eds.) (2002). *Health Inequalities in the New Scotland*. Glasgow: Public Health Institute of Scotland.
- Burch, S. (2008). Cultural and Anthropological Studies. In: J. Naidoo, and J. Wills (eds.) (2008) *Health Studies – an introduction* (2nd ed.). Palgrave Macmillan.
- Cagney, K.A. and Browning, C.R. (2004). Exploring neighborhood-level variation in asthma and other respiratory diseases: the contribution of neighborhood social context. *Journal of General Internal Medicine*, 19 (3), 229-236.
- Cialdini, R. B., Kallgren, C. A. and Reno, R. R. (1991). A focus theory of normative conduct: a theoretical refinement and re-evaluation of the role of norms in human behaviour. *Advances in Experimental Social Psychology*, 12, 105-109.
- Congdon, P. (1996). Suicide and parasuicide in London: a small-area study. *Urban Studies*, 33, 137–158.
- Cummins, S., Curtis, S., Diez-Roux, A. V. and Macintyre, S. (2007). Understanding and representing ‘place’ in health research: A relational approach. *Social Science and Medicine*, 65(9), 1825-1838.
- Cummins, S., Stafford, M., Macintyre, S., Marmot, M. and Ellaway, A. (2005). Neighbourhood environment and its association with self-rated health: evidence from Scotland and England. *Journal of Epidemiology and Community health*, 59, 207-213.
- Curtis, S. (2004). *Health and Inequality: Geographical Perspectives*. Thousand Oaks, CA: Sage.
- Curtis, S. (2010). *Space, Place and Mental Health*. Ashgate, Farnham, UK.
- Curtis, S. and Riva, M. (2009). Complexity and geographies of health care systems and policy. *Progress in Human Geography*, 34 (4) 513-520.
- Curtis, S, Gesler, W., Smith, G. and Washburn, S. (2000). Approaches to sampling and case selection in qualitative research: examples in the geography of health. *Social Science and Medicine*, 50, 1001-14.

- De Koninck, M. and Pampalon, R. (2007). Living Environments and Health at the Local Level: The Case of Three Localities in the Québec City Region. *Canadian Journal of Public Health*, 98, 45-53.
- Diez-Roux, A. (2001). Investigating neighborhood and area effects on health. *American Journal of Public Health*, 91, 1783–1789.
- Diez-Roux, A.V., Nieto, F.J., Muntaner, C., Tyroler, H.A., Comstock, G.W., Shahar, E., Cooper, L.S., Watson, R.L. and Szklo, M. (1997). Neighborhood environments and coronary heart disease: a multilevel analysis. *American Journal of Epidemiology*, 146, 48-63.
- Droomers, M., Schrijvers, C.T.M. and Mackenbach, J. P. (2001). Educational level and decreases in leisure time physical activity: Predictors from the longitudinal GLOBE study. *Journal of Epidemiology and Community Health*, 55 (8), 562-568.
- Duncan, C., Jones, K. and Moon, G. (1993). Do places matter – a multilevel analysis of regional variations in health-related behaviour in Britain? *Social Science & Medicine*, 37 (6), 725–733.
- Duncan, C., Jones, K. and Moon, G. (1996). Health related behavioring context: a multilevel modelling approach. *Social Science and Medicine*, 42 (6), 817–30.
- Duncan, C., Jones, K. and Moon, G. (1999). Smoking and deprivation: are there neighbourhood effects? *Social Science and Medicine*, 48, 497-505.
- Erikson, R. (2001). Why do Graduates Live Longer? In: J.O. Jonsson, and C. Mills (eds.), *Cradle to grave: Life-course change in modern Sweden*. Durham: Sociology Press.
- Ewles, L. (2005). *Key Topics in Public Health Promotion*. London: Elsevier Churchill Livingstone.
- Fagg, J. (2009). *Transitions of self-esteem and neighbourhood deprivation, findings from the British Household Panel Study*. PhD. Department of Geography, Queen Mary, University of London.
- Feldman, P.J. and Steptoe, A. (2004). How neighborhoods and physical functioning are related: the roles of neighborhood socioeconomic status, perceived neighborhood strain, and individual health risk factors. *Annals of Behavioral Medicine*, 27, 91-99.
- Fowler, J.H. and Christakis, N. A., (2008). Estimating peer effects on health in Social networks: A response to Cohen-Cole and Fletcher; and Trogdon, Nonnemaker, and Pais. *Journal of Health Economics*, 27, 1400-1405.
- Frohlich, K. L., Potvin, L., Chabot, P. and Corin, E. (2002). A theoretical and empirical analysis of context: neighbourhoods, smoking and youth. *Social Science and Medicine*, 54, 1401-17.
- Furstenberg, F.F., Cook, T.D., Eccles, J., Elder, G.H. and Sameroff, A. (1999). *Managing to make it: Urban families and adolescent success*. Chicago: University of Chicago Press.
- Gattrel, A. and Elliot, S. (2015). *Geographies of health: an introduction* (3rd ed.). NYSE: John Wiley.
- Giles-Corti, B. and Donovan, R.J., (2002). The relative influence of individual, social and physical environment determinants of physical activity. *Social Science and Medicine*, 54, 1793-1812.
- Haney T.J. (2007). Broken Windows and Self-Esteem: subjective understandings of neighbourhood Poverty and Disorder. *Social Science Research*, 36 (3), 968-994.
- Hanlon, P., Walsh, D. and Whyte, B. (2006). *Let Glasgow Flourish*. Glasgow: Glasgow Centre for Population Health.
- Harvey, D. (1973). *Social Justice and the City*. London: Edward Arnold.
- Jones, K. and Moon, G. (1993). Medical geography: taking space seriously. *Progress in Human Geography*, 17, 515-24.

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- Judge, K., Platt, S., Costongs, C. and Jurczak, K. (2006). *Health Inequalities: A challenge for Europe*. London: Department of Health.
- Kearns, R., (1993). Place and Health: towards a reformed medical geography. *The Professional Geographer*, 45, 139-147.
- Keizer, K., Lindenberg, S. and Steg, L. (2008). The spreading of disorder. *Science*, 332, 1681-1685.
- Keizer, K., Lindenberg, S. and Steg, L. (2013). The importance of demonstratively restoring order. *Plus One*, 8 (6), 65137.
- Kelling, G. and Coles, C. (1996). *Fixing broken windows: Restoring order and reducing crime in our communities*. New York: Free Press.
- Macintyre, S. and Ellaway, A. (2000). Ecological approaches: Rediscovering the role of the physical and social environment. In L. Berkman, and I. Kawachi (eds.), *Social epidemiology* Oxford: Oxford University Press, 332–348.
- Macintyre, S., Ellaway, A. and Cummins, S. (2002). Place effects on health: How can we conceptualise, operationalise and measure them? *Social Science and Medicine*, 55 (1), 125-139.
- Macintyre, S., Maciver, S. and Soomans, A. (1993). Area, class and health: Should we be focusing in places or people. *Journal of Social Policy*, 22 (2), 213-234.
- Marmot, M. and Brunner, E. (2005). Cohort profile: The Whitehall II study. *International Journal of Epidemiology*, 34, 251-56.
- Marmot, M. and Wilkinson, R. (1999). *Social Determinants of Health*. Oxford: Oxford University Press.
- Martikainen, P., Kauppinen, T.M. and Valkonen, T. (2003). Effects of the characteristics of neighbourhoods and the characteristics of people on cause specific mortality: a register based follow up study of 252,000 men. *Journal of Epidemiology and Community Health*, 57, 210-217.
- Pampalon, R. and Raymond, G. (2000). A deprivation index for health and welfare planning in Quebec. *Chronic Diseases in Canada*, 21 (3), 104-113.
- Pampalon, R., Hamel, D. and Gamache, P. (2008). Recent changes in the geography of social disparities in premature mortality in Quebec. *Social Science and Medicine*, 67, 1269-1281.
- Putnam, R.D. (1995). Tuning in, Tuning out - the Strange Disappearance of Social Capital in America. *Political Science and Politics*, 28 (4), 664-683.
- Satariano, B. and Curtis, S.E. (2018) The experience of Social Determinants of Health within a Southern European Maltese culture. *Health and Place*, 51C 45-51.
- Shouls, S., Congdon, P. and Curtis, S. (1996). Modelling inequality in reported long term illness in the UK: combining individual and area characteristics. *Journal of Epidemiol Community Health*, 50, 366-76.
- Smith, S.J. and Easterlow, D. (2005). The strange geography of health inequalities. *Transactions of the Institute of British Geographers*, 30, pp.173-190.
- Suhrcke, M. and de Paz Nieves, C. (2011). *The impact of health and health behaviours on educational outcomes in high income countries: a review of evidence*. Copenhagen: WHO Regional Office for Europe.
- Sundquist, J., Malmstrom, M. and Johansson, S.E. (1999). Neighborhood environment and self-reported health status: a multilevel analysis. *American Journal of Public Health*, 89, 1181-1186.

- Twigg, L. (2014). Geographies of space, place and population health. In *The Wiley Blackwell encyclopaedia of health, illness, behaviour, and society*. Cockerham, W. C., Dingwall, R. and Quah, S. R. (eds.). Chichester: Wiley-Blackwell Publishing Ltd.
- Waitzman, N. and Smith, K. (1998). Phantom of the area: Poverty-area residence and mortality in the United States. *American Journal of Public Health*, 88, 973-976.
- Weich, S., Blanchard, M., Prince, M., Burton, E., Erens, B. and Sproston, K. (2002). Mental health and the built environment: Cross-sectional survey of individual and contextual risk factors for depression. *British Journal of Psychiatry*, 180, 428-433.
- Weich, S., Twigg, L., Holt, G., Lewis, G. and Jones, K. (2003). Contextual risk factors for the common mental disorders in Britain: a multilevel investigation of the effects of place. *Journal of Epidemiology Community Health*, 57, 616-621.
- Whitley, E., Gunnell, D., Dorling, D. and Smith, G. (1999). Ecological fragmentation, poverty and suicide. *British Medical Journal*, 319, 1034-1037.
- Wight, R.G., Cummings, J.R., Karlamangla, A.S. and Aneshensel, C.S. (2010). Urban neighborhood context and mortality in late life. *Journal of Aging and Health*, 22, 197-218.
- Wilkinson, R. (1996). *Unhealthy Societies: The Afflictions of Inequality*. London: Routledge.
- Wilkinson, R. and Pickett, K. (2009). *The spirit level. Why more equal societies almost always do better*. London, UK: Penguin Books.
- Wilkinson, R.G. (1999). Income inequalities, social cohesion and health: clarifying the theory. *International Journal of Health Services*, 29, 525-543.
- Wilkinson, R.G. and Pickett, K.E. (2006). Income inequality and population health: a review and explanation of the evidence. *Social Science & Medicine*, 62 (7), 1768-1784.
- Wilson, W.J. (1987). *The Truly Disadvantaged: The Inner City, the Underclass, and Public Policy*. Chicago: University of Chicago Press.
- World Health Organization (2008). *The World Health Report 2008: Primary Health Care- Now More Than Ever*. Geneva: WHO.
- World Health Organization (2009). *Health Impact Assessment: Determinants of Health*.
- Yen, I. and Kaplan, G. (1998). Poverty area residence and changes in Physical activity level. *American Journal of Public Health*, 88,709-1712.

Bio-note

Dr Bernadine Satariano is a Lecturer in Geography, B.A. (Hons.) (Melit.), P.G.C.E. (Melit.), M.A. (Melit.), PhD (Dunelm), Fellow of the Royal Geographical Society (F.R.G.S.). Her main area of interest explores how important place is for human health. Her research focuses on socio-geographical processes related to inequalities in health and wellbeing within a Maltese context. She presented some of her research studies at the University of Portsmouth, Durham University, Paris Nanterre University, University of San Francisco, University of Angers and Cardiff University.