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The ties that bind? Social networks of nursing staff and staff's behaviour towards residents with dementia

Adriana P.A. van Beek[a,*], Cordula Wagner[a,b], Dinnus H.M. Frijters[c], Miel W. Ribbe[c], Peter P. Groenewegen[a,d,e]

[a] NIVEL: Netherlands Institute for Health Services Research, PO BOX 1568, 3500 BN Utrecht, The Netherlands
[b] EMGO+, Department of Public and Occupational Health, VU University Medical Center, Van der Boechorststraat 7, 1081 BT Amsterdam, The Netherlands
[c] EMGO+, Department of Nursing Home Medicine, VU University Medical Center, Van der Boechorststraat 7, 1081 BT Amsterdam, The Netherlands
[d] Utrecht University, Department of Sociology, PO BOX 80.115, 3508 TC Utrecht, The Netherlands
[e] Utrecht University, Department of Human Geography, PO BOX 80.115, 3508 TC Utrecht, The Netherlands

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ABSTRACT

This study investigated social networks of nursing staff and staff's behaviour towards residents with dementia. We focused on two types of networks: communication networks among staff, and networks between nursing staff and relatives/acquaintances of residents. Data was collected in 37 long-term care units in nursing- and residential homes in the Netherlands.

In units with more networks between nursing staff and relatives of residents, staff treated residents with more respect and were more at ease with residents. Social networks were also positively related to staff's organizational identification which, in turn, related to their work motivation and their behaviour towards residents.

1. Introduction

Attitudes and behaviours of nursing staff towards patients are an essential aspect of quality of care in health-settings (Lothian and Philp, 2001; Boscart, 2009). Treatment of elderly patients is particularly important in long-term care settings. Because of their prolonged stay and health problems elderly residents in long-term care are extremely vulnerable and find themselves in an asymmetrical relationship with the nursing staff (Nelson, 2000). This is especially true for elderly residents with cognitive disorders such as dementia. Several studies have shown the importance of good verbal and non-verbal communication skills of nursing staff in dementia care (Rundqvist and Severinsson, 1999; Perry et al., 2005). Yet, controlling and directive behaviours of nursing staff towards elderly occur frequently (Hewison, 1995). Nursing staff in nursing homes often only communicate with residents with dementia during care-activities and then they predominantly give instructions and orders (Van Bilsen et al., 1998; Christenson et al., 2011). In addition, nursing staff cannot always understand the communication of residents resulting in low quality interaction (Van Bilsen et al., 1998), leaving nursing staff with feelings of frustration and helplessness (Pursey and Luker, 1995; Graneheim et al., 2001).

Long-term care can be characterized by the extreme frailty of its patients and an educationally diverse staff (Scott et al., 2004). In this particular setting, communication and teamwork between nursing staff are found to be important for quality improvement (Scott et al., 2004), and more open communication between nursing staff seems to be related to better resident outcomes such as mobility (Anderson et al., 2003). Contacts between nursing staff and relatives of residents are also deemed important for both care processes and outcomes for residents (Bluestein and Latham-Bach, 2007). However, at the moment it is still unclear how communication among nursing staff and between nursing staff and relatives of residents are related to care processes and through which mechanisms they influence quality of care.

In this article, we study care processes in long-term dementia care from a social network approach. We look at communication networks among nursing staff and networks of nursing staff with relatives and acquaintances of residents, and investigate how these networks are related to nursing staff's treatment of residents.

2. Theoretical background

Krackhardt and Hanson (1993) define communication networks as the informal networks of employees who talk about work-related matters on a regular basis. Ties between nursing staff

* Corresponding author. Present address: ActiZ, PO Box 8258, 3503 RG Utrecht, The Netherlands, Tel.: +31 30 273 94 33; fax: +31 30 273 97 87.
E-mail addresses: s.van.beek@actiz.nl (A.P.A. van Beek), c.wagner@nivel.nl (C. Wagner), d.frijters@vumc.nl (D.H.M. Frijters), mw.ribbe@vumc.nl (M.W. Ribbe), p.groenewegen@nivel.nl (P.P. Groenewegen).

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and relatives and acquaintances of residents cross the boundary of the organization. In line with Reagans and Zuckerman (2001), we name these ties boundary-spanning or boundary-crossing networks because they place employees in direct contact with third parties outside the organization.

Networks are often described by the density of interpersonal ties of its members, where density is seen as a measure of social cohesion (Friedkin, 2004). Since Seashore's classical study (1954) there have been multiple studies that link cohesion of networks to group outcomes (see Lott and Lott, 1965; Evans and Dion, 1991). Yet, results remain inconclusive, partly because conceptualizations of social cohesion differ greatly (Friedkin, 2004). Festinger (1950) first proposed that social cohesion should be seen as the causal system that determines individuals' membership attitudes and behaviours (see Friedkin, 2004). In this manner, conditions at the group-level can be seen as antecedents of attitudes and behaviour of group-members at the individual level (Friedkin, 2004).

Over the years, several mechanisms are named through which networks influence behaviour of group-members. First, density of networks is believed to enable information exchange between actors. Granovetter (1973) first identified the strength of weak ties: low density networks of socially distant actors are more effective in information exchange and innovation than high density networks of closely knit actors (Flache and Macy, 1996). Burt (1992) argued that a network in which a person has contacts with few others who provide unique information (a network with structural holes) is more productive than a network in which one has contacts with many others who provide the same information. Low density networks seem to be especially efficient for information exchange in more competitive work-settings. Tasks that depend on cooperation on the other hand seem to profit from networks with a high density (Flap and Völker, 2001).

Second, cohesive networks are deemed to affect trust between actors. Buskens and Raub (2002) name two aspects through which socially embedded relations affect trust: earlier experiences with actors (learning) and possibilities to sanction untrustworthy actors (control). Control in a social network can be the result of direct sanctioning between actors, but can also be the result of sanctioning by third parties and may even lead to social isolation if untrustworthy behaviour is detected. Research of control has mainly focused on its positive effects. However, Flache and Macy (1996) also name a negative effect of social cohesion, or – as they name it – a weakness of strong ties. They argue that relations between two group-members evolve more rapidly than exchanges between all group-members in a group. When strong ties between two actors are established, social control is aimed at the maintenance of these interpersonal relationships instead of compliance with group obligations, which may decrease group effectiveness.

Third, cohesive networks enhance social support. Close-knit networks exchange more affective and instrumental support (Heaney and Israel, 2008), which in turn is related to individual wellbeing. In studies, social support has also been associated with lower levels of work stress and work strain, although overall results remain inconclusive (Viswesvaran et al., 1999).

Fourth, networks provide a sense of social identity (Podolny and Baron, 1997). According to the Social Identity Theory (Tajfel and Turner, 1979) a person's self-image is connected to the image of the group to which he or she belongs; individuals define themselves in terms of their group-membership and ascribe typical characteristics of the group to themselves. For social identification to occur, group-membership has to be made salient (Van Knippenberg, 2000); especially closed and cohesive networks are deemed to facilitate social identity (Jones and Volpe, 2011). Social Identity Theory forms the basis for organizational identification, which is related to feelings of attachment and loyalty to the organization (Mael and Tetrick, 1992). Several studies have investigated the relationship between social networks and organizational identification focusing on individual's networks (see Jones and Volpe, 2011 for an overview). Bartels et al. (2007) found that determinants of identification with the organization as a whole differ from the determinants of employees' identification with lower organizational levels. The climate of internal communication was especially important for the identification with the lower levels of the organization. Perceived external prestige appeared more important for employees' identification with the overall organization.

How are these mechanisms of social networks related to the treatment of residents with dementia in long-term care? We expect social networks to be related to behaviour of nursing staff both directly and indirectly. First, we expect that the existence of boundary-crossing ties between nursing staff and relatives/acquaintances of residents will affect behaviour of nursing staff towards residents directly because these contacts provide information on the background and habits of residents. Information about elderly residents, that those residents cannot provide themselves due to their dementia.

In addition, we argue that boundary-crossing ties will also guide the appropriate treatment of residents because they enhance trust. We will explain this reasoning through the concept of embeddedness as described by Granovetter (1985, 2005) and Uzzi (1997). Uzzi (1997) noted that socially embedded ties in exchange networks are often formed through referrals by third-parties or previous personal relationships (Uzzi, 1997). Trust is seen as a primary feature of these embedded ties (Granovetter, 1985, 2005) and described by Uzzi (1997) as: '*the belief that an exchange partner would not act in self-interest at another's expense*'. When untrustworthy behaviour is detected, this not only affects further exchanges between two actors, but information about untrustworthy behaviour will also spread to others in the extended network that is shared by actors (Uzzi, 1997), increasing the chances of punishment (Granovetter, 2005).

Boundary-crossing ties of nursing staff with relatives or acquaintances of residents represent the manner in which staff members and residents are embedded in the community outside the organization. If these ties exist, we expect that staff members will be less likely to act in self-interest at the expense of the resident. For instance by treating residents poorly or by rushing aspects of care to be able to spend time chatting to colleagues. Furthermore, when a boundary-crossing tie exists, untrustworthy behaviour of staff members will not only affect the relationship with the resident. It will also influence the relationship between the staff member and family/acquaintances of this resident outside the long-term care facility, giving these third parties opportunities to sanction unwanted behaviour (control) (Buskens and Raub, 2002). Notably, an important distinction from the original (economic) exchanges described by Uzzi (1997) and Granovetter (1985, 2005) is that there exists no equal exchange relationship between staff members and residents with dementia, making residents with dementia extremely vulnerable. For this reason, we expect that the possibilities of control by third parties become even more important in this setting.

Based on these expectations we define the following general hypothesis:

H1. On dementia units with more boundary-crossing networks residents are given a better treatment.

Second, we expect that boundary-crossing and communication networks will indirectly influence behaviour through staff members' identification with the organization. We specify our expectations on the level of individual staff members and at unit-level. First, we expect that boundary-crossing ties will increase identification with the organization as third parties will regard staff