Social Support and Health in Italy: The Impact of the Disease During the COVID-19 Pandemic

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Abstract

The COVID-19 pandemic has put a strain on formal and informal support and care networks, which have had to draw on their reserves of social capital to deal with the health emergency. As part of a national research project on "Social capital as resource of care practice in Italy: Caregiving and social support in pandemic time", this research aimed to monitor the dynamics related to the mechanisms that lead individuals to provide support, to the point of assuming, where appropriate, the role of caregiver. This article presents the results of qualitative research that focused on the personal support networks of persons who have contracted COVID-19 and persons who have faced a chronic/chronic degenerative disease during the pandemic period. The study reveals a scenario in which, despite the health emergency and general restrictions on social relations, social support relationships have not been lost, and individuals have relied on their social resources, i.e., social support in its various relational dimensions. Furthermore, it clearly emerged that residential proximity contexts have expanded individuals' ability to take on the role of mediators in their personal support networks and, in this way, to develop them significantly. Expanding the support network, guaranteed by mediation, has led to a greater sense of well-being.

Keywords: social support, social networks, personal support networks, COVID-19, illness, personal network analysis, qualitative research.

1. Introduction

The COVID-19 pandemic has highlighted the extent of the country's healthcare, social, economic, and care needs. However, the supply side of aid

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provision has also emerged alongside the demand side. This is the focus of this paper, which is based on the results of a national PRIN 2022 research project entitled "Social capital as resource of care practice in Italy: Caregiving and social support in pandemic time", which aimed to investigate in a multidimensional way who cares, formally and informally, for people in a state of fragility and who offers support in different situations of vulnerability. The research project[1], as a whole, investigates helping relationships, the networks that derive from them, and the practices that emanate from them, as forms of social capital mobilized by individuals. The research was conducted according to the structural interactionist approach, according to which the networks within which the subjects find themselves are, at the same time, a constraint and an emerging effect of their actions (Degenne & Forsé, 2004; Tronca, 2013; Tronca & Forsé, 2022; Tronca & Sità, 2019). A multidimensional and systematic analysis was therefore launched to assess the country's condition regarding the provision of social resources, i.e., capital, in the sense that it is constitutively composed of relationships, and on which there is already some initial general evidence about the COVID-19 pandemic and the Italian context (Tronca, 2021). From a methodological perspective, a research design was employed that involved conducting several qualitative surveys, a quantitative study at the national level, and a national-level quantitative survey. This qualitative research focused on individuals and their networks of relationships that offered support in the aforementioned situations of vulnerability, without identifying a specific caregiving role or a specific problem of fragility, but instead performing a targeted support function in the management of various critical issues during the COVID-19 pandemic, i.e., from March 11, 2020, to May 5, 2023. Behavioral strategies to defend against the virus affected the personal support networks of COVID-19 patients and those who, with pre-existing conditions that were often chronic and degenerative other than COVID-19, faced their illness/disability in a context in which the National Health Service had to

drastically recalibrate its intervention because it was engaged in managing the pandemic (Vicarelli & Giarelli, 2021). As a result, all support and care networks, both formal and informal, have been put to the test and have had to draw on their reserves of social capital. Research conducted at the height of the pandemic (Bramanti et al., 2021; Bramanti & Nanetti, 2022) documented a significant trend toward the reorganization of primary networks, which tend to include external individuals (in a care role) belonging to both proximity/friendship networks, as well as paid networks, such as family assistants. This qualitative part of the general PRIN 2022 research project aimed to monitor the dynamics relating to the mechanisms that lead individuals to provide support, to the point of taking on, where necessary, the role of caregiver, and the subjective perception of well-being by citizens, with reference to two areas that cut across the entire population of residents in Italy, namely the labor market and health conditions, which have been heavily affected by the pandemic. This article will focus on the health dimension, leaving the labor dimension to the contribution by Cecchi et al. (2025), in this issue of the Italian Sociological Review. Regarding the health dimension, we aim to understand the effects, in terms of the mechanisms generated, on the support function and the role of caregivers during the pandemic period (Poggi, 2020; Gutin et al., 2021).

2.   Social networks, social support, and caregiving

Social networks, comprising family members, friends, colleagues, neighbors, and acquaintances, constitute the environment in which individuals give and receive social support. In some situations, this support intensifies to become an actual caregiving relationship, when a dependency relationship is created between the parties (Di Nicola & Viviani, 2020), which is manifested in caregiving. Analyzing social support as an element that circulates within personal networks and caregiving as a concrete and moral element that characterizes certain social networks will enable us to interpret some of the results of the qualitative research discussed in this article with greater insight. Regarding caregiving, we have chosen to adopt the definition used by the Italian National Institute of Statistics (Istat, 2022, Table 6.1.1), which is derived from the 2019 Italian edition of the EHIS (European Health Interview Survey). According to this survey, a caregiver is defined as someone who provides care or assistance at least once a week to people with problems related to ageing, chronic diseases, or infirmity. In our survey, we have interpreted "infirmity" as "disability" to reduce overlap with the other two categories of frailty and to help respondents more clearly identify persons with disabilities as those receiving help. Caregiving, therefore, refers to the set of care activities provided to a

person in a fragile condition, with a disability, or who is not self-sufficient, i.e., a relational and social activity within family, community, and institutional networks. It is often unpaid work within family networks, mostly performed by family members, particularly women, who care for elderly, persons with disabilities, or sick relatives on a daily basis. Sociologist Joan Tronto (1993) conceptualises caregiving as care work, a practical act and an asymmetrical relationship that involves moral responsibilities, emotional skills, and complex management of social roles. The role of caregiver is often assumed not by choice, but as a consequence of family expectations, cultural norms, or social pressures. This role can conflict with other roles the individual holds, such as those of worker or parent, leading to role stress or overload. Therefore, those who work as carers provide care, which family sociologist Paola Di Nicola (with Viviani, 2020) defines as "a social relationship in which one person responds to the dependency needs of another person who does not have the capacity or strength to satisfy their own needs independently". It should be added that the semantics of care are rather complex, which is why it is useful to refer once again to Tronto's (1993) proposal to divide care into phases: caring about (recognising that there is a need), taking care of (assuming responsibility for responding to that need), caregiving (providing concrete help with competence), and care receiving (assessing how the recipient receives care). For further information on the issue of care – caregiving – caregivers, please refer to Bramanti & Carradore (2025), Boccacin & Nanetti (2025) and Bosoni & Carradore (2025) in this issue. As mentioned above, social support also circulates in social networks. This refers to the set of material, emotional, and symbolic resources that an individual receives (or perceives to receive) through their network of relationships (Cobb, 1976; House, 1981). In other words, individuals receive material, symbolic, and relational resources from their social network, which can positively influence their quality of life, psychological well-being, and collective cohesion (Song et al., 2011). Social support influences psychological and physical well-being, protects against the harmful effects of stress, and promotes general health (Schwarzer & Buchwald, 2004; Uchino, 2004). Social support is an individual resource, a structural dimension, and an indicator of collective cohesion. Through it, individuals find protection, identity, opportunities, constraints, and pressures. One aspect of Cohen's fundamental contribution concerns the classification of different forms of support. He identified at least four main types: emotional support, which includes empathy, affection, and understanding; informational support, which consists of providing useful advice and guidance; instrumental support, i.e., material and practical help; and evaluative support, which manifests itself through feedback and social recognition (Cohen & McKay, 1984). Cohen and Wills (1985, p. 313) argue, "Social companionship is spending time with others

in leisure and recreational activities. This may reduce stress by fulfilling a need for affiliation and contact with others, helping distract persons from worrying about problems, or facilitating positive affective moods. This dimension has also been referred to as diffuse support and belongingness". Without distinction, those involved in social support have observed that these dimensions do not act separately, but are intertwined in everyday experiences. In addition to the type of social support, the quality of social relationships is also fundamental, rather than just the quantity. On this point, Cohen (1992) notes that although a large social network can increase opportunities for support, not all relationships contribute to well-being; superficial or conflictual relationships can even increase stress levels. As previously mentioned, Cohen (2004) notes that the perceived availability of support, rather than the number of contacts, has the most significant influence on health outcomes. Social support, therefore, performs various functions, as it protects against social marginalisation by reducing the risks of exclusion and isolation and strengthening community cohesion. It promotes health, as people with richer social networks have been found to have lower levels of stress, depression, and mortality (Berkman & Glass, 2000). It contributes to the regulation of social norms, i.e., social networks transmit values, behavioral patterns, and shared expectations, helping to maintain social order. It acts as a factor that facilitates social mobility, as informational and relational support can offer educational and professional opportunities, thereby reducing inequalities. This also suggests that social support plays a systemic role that extends beyond the psychological dimension and impacts the social structure. Personal networks are, therefore, the channel through which various forms of social support (informational, instrumental, emotional, affiliative) are exchanged between individuals and, in this respect, social support promotes well-being through its ability to cushion stress, positively influencing individuals' assessments of their own ability to cope with a stressful situation or directly providing the resources needed to deal with difficulties (Cohen et al., 2000; Kawachi & Berkman, 2000). Support networks can also affect perceived health outcomes (Lindström, 2008; Uchino, 2004, 2006, 2009), improving them (Kawachi et al., 1999; Kawachi & Berkman, 2000) and sometimes worsening them (Villalonga-Olives & Kawachi, 2017; Uchino, 2004, 2006, 2009). In this sense, we can discuss perceived health, even in the context of illness, as we often encounter forms of adaptation to chronic illness. About the forms of support networks and COVID-19, which has had a peculiar effect on entire national populations, as it has been directly combated with collective social distancing practices, we recall that in Italy, i.e. in the context under investigation here, it emerged that personal support networks, at the end of 2020, i.e. in the midst of the pandemic, were affected by the phenomenon of pandemic brokerage, which 'consists, in essence, of the fact

that, during the COVID-19 pandemic, personal support networks grew around individuals, but not as communities: support networks, under renewed regulatory conditions relating to forms of interaction, grow in response to the increased contingency and unpredictability of the external environment, but not as communities and, therefore, grow in terms of relationships that tend not to be redundant" (Tronca, 2021, p. 146). In essence, the pandemic has led to an increase in the size of support networks in Italy, accompanied by a decrease in their density. However, this growth had disappeared by 2022, while the density of these networks continued to decline (Tronca, 2023).

3. Materials and methods

In this article, as mentioned above, we will present only part of the PRIN 2022 research project "Social capital as resource of care practice in Italy: Caregiving and social support in pandemic time", namely the qualitative research that focused on the dimension of social support in relation to particular conditions of illness. In particular, there are two specific areas of focus:

I. the experience of those who contracted the virus or who lived with a chronic and/or chronic-degenerative disease during the COVID-19 pandemic;

II. The experience of social and healthcare workers (social workers with coordination and management roles) and healthcare professionals (general practitioners) who, due to their roles, could help provide information about caregiving concerning those who had contracted the virus or who had experienced a different illness.

The survey plan thus provided for in-depth interviews to be conducted remotely, with audio and video recordings, subject to the signing of a specific informed consent form, as follows:

- 8 in-depth online interviews with individuals who had COVID-19 during the pandemic period (11 March 2020 – 5 May 2023) and who did NOT have any chronic conditions during the same period;
- 8 in-depth online interviews with individuals with at least one chronic condition, experienced during the pandemic period (11 March 2020 – 5 May 2023) and who did NOT have COVID-19 during the same period;
- 4 social workers with coordination and management functions;
- 4 general practitioners.

While the 16 interviews with individuals provided direct information, with respect to individuals with pathologies, on the subject of this paper, namely the mobilisation of social support and possible caregiving during the pandemic, the eight interviews with professionals allowed us to gather the experiences, again

with respect to the subject of the paper, of particularly significant witnesses in the field of illness and social distress.

The 16 people who contracted the virus or had a chronic illness during the pandemic were also given a questionnaire that allowed their support networks to be studied using personal network analysis (PNA) tools (Table 1). While the PRIN 2022 research team developed all the data collection tools, the collection of quantitative and qualitative data from these 16 individuals was carried out by the research company Ipsos S.r.l. in Milan, between May 8 and 29, 2024, using tools provided by the research team, on subjects identified by Ipsos S.r.l. Through its network of selectors spread throughout Italy, Ipsos S.r.l. relies on identifying suitable participants for qualitative surveys based on agreed characteristics.

The completion of a quantitative questionnaire always preceded the qualitative interview.

The interview questions were designed to understand whether, during the pandemic, these individuals had the opportunity to help someone in particular, whether they did so alone or in collaboration with someone else, whether they did so upon request or on their own initiative, and why they chose to help. In addition, they were asked whether they had received help, for what reasons, and whether they had explicitly asked for it. Finally, we investigated whether everything that happened would have occurred even if there had not been a health emergency, such as the one caused by COVID-19. Then we tried to elicit how the interviewees felt about their recounting experiences.

The 16 participants were recruited according to the following inclusion criteria: having had a chronic and/or chronic degenerative disease during the pandemic, or having contracted COVID-19, also during the pandemic, and having the technical equipment to participate in a remote interview, agreeing to sign the informed consent form, and being sufficiently fluent in Italian.

Once the quantitative phase was completed and the collected information was provided to the moderator, we proceeded to the face-to-face and online qualitative interviews. The interviews were recorded and transcribed in Word text format[2]. The in-depth interviews with the eight professionals were conducted between 14 June and 29 October 2024 by Prof. Cristina Lonardi with people working in the north-west, north-east, centre, and south of the country (Table 2). The inclusion criteria for these eight interviews were that the

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[2] The author analysed the data received from Ipsos S.r.l. All data was collected in Italian and using tools developed in Italian. Specifically, the quantitative data were processed using IBM SPSS Statistics Version 23 (Release 23.0.0.0) software, the network data were processed using Ucinet 6.560 software (Borgatti et al., 2002), and their visual representation was obtained using NetDraw 2.158 software (Borgatti, 2002).

individuals had worked as social workers with coordination duties and as general practitioners during the pandemic, were available for the interview and to sign the informed consent form, and had the technical equipment to participate in a remote interview.

The section dedicated to professionals sought to understand whether and how they saw changes in the family/friend support networks of the people they cared for and what forms of informal help/support they saw circulating most among them, any shortcomings complained about, any changes in the relationship between caregivers and care recipients, what motivations may have led people to provide support/help to the point of becoming caregivers, if this happened, any changes in the caregiving role before and after the pandemic, and what new/unprecedented needs emerged among care recipients, caregivers and those who provided some form of social support.

The recorded audio and video materials were then transcribed verbatim. The small number of interviews and their short average duration led to a traditional paper-and-pencil qualitative content analysis, which proved effective in combining the narrative material with the network data and their respective graphical representations, as well as the intersections of content between the two groups of interviewees.

As mentioned above, 16 people with chronic diseases or who had previously contracted COVID-19 were given a questionnaire, which, in addition to collecting personal and contextual information, allowed us to collect relational data valuable for the practice of PNA. Respondents could always choose "I don't know" or "I prefer not to answer" for each question. This paper will only consider cases with valid values for the characteristics presented. In particular, name generators, name interpreters, and a name interrelator were used (Tronca, 2013). We present these tools in the order in which they were administered in the questionnaire, as we believe that this makes it easier for us to clarify the overall logic of their use.

Name generators are used to generate lists of names, which, in this case, were needed to reconstruct the network connected to the support links of the people (alter) around each interviewee (ego). Here is the text of the first name generator used: "In everyday life, we sometimes have to deal with needs or solve problems. Very often, it is essential to be able to rely on the help and support of the people we are in a relationship with. Let us now talk about the people to whom you provided free support or help during the COVID-19 pandemic and whom you may no longer support or help today. Could you indicate below how many people you provided support or assistance to during the COVID-19 pandemic, even for a short or very short period, when they needed it in their daily lives?".

Table 1. Respondents with chronic/degenerative diseases or who contracted COVID-19.

ID inerview	COVID-19 / Chronic disease	Gender (M: male; F: female)	Age	Geographical area of residence	Lives with	Number of network nodes	Relations (R: relative; F: friend; N: neighbour)	Educational qualification	Occupation/work status
1072	COVID-19	M	34	Islands	Spouse/partner with children	3	R	High school diploma	Clerical worker – Employee in private sector
1059	COVID-19	M	36	Center	Alone	2	F	Bachelor's degree	Manager in private sector
1061	COVID-19	M	64	North East	Spouse/partner with no children	2	R	High school diploma	Enterpreneur
1064	COVID-19	F	44	North East	Spouse/partner with children	5	P F N	High school diploma	Clerical worker – Employee in private sector
1069	COVID-19	F	23	Center	Alone	5	R F	High school diploma	Student
1070	COVID-19	F	30	Islands	Spouse/partner with children	5	R	Bachelor's degree	Atypical worker
1060	COVID-19	M	38	South	Alone	6	R F	High school diploma	Self employed worker
1062	COVID-19	M	41	South	Spouse/partner with children	9	F N	Bachelor's degree	Clerical worker – Employee in private sector
1067	Chronic disease	F	60	South	Spouse/partner with children	12	N	High school diploma	Housewife
1068	Chronic disease	F	53	South	Spouse/partner with children	7	R N	Vocational diploma	Clerical worker – Employee in private sector
1066	Chronic disease	F	22	South	Spouse/partner with children	11	P F N	High school diploma	Executive worker – Employee in private sector
1058	Chronic disease	F	55	North East	Alone	3	N	High school diploma	Executive worker – Employee in private sector
1071	Chronic disease	M	60	Islands	Spouse/partner with children	3	R F	Middle school licence	Executive worker – Employee in private sector
1063	Chronic disease	M	38	North East	Alone	3	N	Bachelor's degree	Manager in public sector
1051	Chronic disease	M	61	Center	Spouse/partner with children	2	F	Bachelor's degree	Manager in private sector
1065	Chronic disease	F	62	Islands	Spouse/partner with no children	5	R F	High school diploma	Housewife

Table 2. Professionals interviewed: social workers and general practitioners.

ID Interview	Occupation	Gender	Geographical area of residence
1080	General practitioner	Female	South
1081	General practitioner	Female	South
1082	General practitioner	Female	North East
1083	General practitioner	Male	North West
1084	Social worker	Female	North West
1085	Social worker	Female	North East
1086	Social worker	Female	Centre
1087	Social worker	Female	South

This question identified the alters, a maximum of eleven[3], to whom the ego provided help. Once this list of names was generated, questions, called name interpreters, were used to obtain information about the alters mentioned and their relationship with the ego. This text preceded the name interpreters: "I now ask you to indicate some of the characteristics that these people had during the COVID-19 pandemic (when you started helping them), whose number you have just mentioned and whom you have helped by providing them with support or assistance when needed in their daily lives".

The name interpreters then made it possible to collect information on the following characteristics for each person indicated: a) Gender[4]; b) Age in years; c) Educational qualification[5]; d) Social circle[6]; e) Help during this period[7]; f) "During the COVID-19 pandemic, were you the caregiver for this person? A caregiver is the main person who provides care or assistance, at least once a week, to a person with problems due to ageing, chronic conditions, or

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[3] For technical reasons, indicating a maximum limit for the number of responses was necessary. As will be seen, the same applies to reports of support received only. The value eleven was obtained by multiplying by four the average number of alters identified as possible sources of help for a sample of adults residing in Italy by the Household Consumption Monitoring Centre of the Department of Human Sciences of the University of Verona in 2022, equal to 2.86 persons (Tronca, 2023). A higher number, to which an equal maximum number could potentially be added for the number of alters from whom help was received (without reciprocating), would have made it very difficult to collect relational data with the name interrelator.

[4] The valid values are: 1) Male; 2) Female; 3) Other.

[5] 1) No educational qualification; 2) Primary school certificate; 3) Middle school certificate; 4) 2-3 year upper secondary school vocational qualification (level II) that does not allow enrolment at university; 5) 4-5 year upper secondary school leaving certificate (level II) that allows enrolment at university; 6) Non-university tertiary diploma (academy of fine arts, conservatory, etc.); 7) University diploma; 8) Degree (all types); 9) Level I or II Master's degree, Specialisation diploma; 10) PhD.

[6] Text of the name interpreter: "During the COVID-19 pandemic (when you started helping them), this person was, for you (if, in theory, you can indicate more than one answer, indicate the one that appears first in the list: for example, if, for one person, you could indicate both "Relative not living with you" and "Neighbour", indicate "Relative not living with you") Valid values that can be indicated: 1) Partner living with you; 2) Partner not living with you; 3) Relative/family member other than your partner, living with you; 4) Other person, not a relative and other than your partner, living with you; 5) Relative not living with you; 6) Friend; 7) Neighbour; 8) Work colleague; 9) Association colleague; 10) Other (specify: ___).

[7] Text of the name interpreter: "Are you still assisting this individual during this period?". Valid values that can be indicated: 1) No; 2) Yes.

disabilities".[8]; g) (if applicable) "Are you the caregiver for this person during this period?"[9]; h) (if applicable) "What kind of problems does/did the person you are/were (during the COVID-19 pandemic) a caregiver for have? (multiple answers possible)", followed by the following valid response options: 1) Problems due to ageing; 2) Problems due to chronic conditions; 3) Problems due to disability.

A further series of name interpreters, referring to these alters, is connected to the content of these helping relationships: "In particular, what kind of support or help did you provide to each of these people during the COVID-19 pandemic? (more than one type of support per line)". At this point, using the relational version of Parsons' AGIL scheme, accompanied by the related symbolic and generalised means of exchange (Donati, 1991), applied to the study of social capital (Tronca, 2007), or social resources, information was collected on the transition of the following forms of help (the relational dimension to which they refer is indicated in square brackets): Money [A]; Other material assistance, e.g. personal care (cooking, personal hygiene, etc.), accompanying to a medical appointment, etc. [A]; Information [A]; Reputation and credentials (the fact that you know them has increased the attention, esteem and/or consideration that this person has enjoyed/enjoys from others and therefore the possibility of achieving their goals: for example, this person has contacted a professional on your behalf who has helped them) [G]; Contacts and interpersonal connections (introduced this person to someone who could help them: for example, introduced this person to someone who became part of their support network and helped them) [I]; Did you provide this person with the most appropriate strategies to achieve their goals (e.g., in terms of advice, moral or psychological support, reassurance, an opportunity to vent, etc.) [L]; Other (specify: ___).

This solution to the problem of understanding the content of helping relationships appears capable of bringing together and expanding on the other solutions previously presented and found in House (1981) and Cohen & McKay (1984).

To complete the reconstruction of the interviewees' support network, an additional name generator was used: "How many people, other than those we have mentioned so far, have provided you with support or help during the COVID-19 pandemic, even for a short or very short period, when you needed it in your daily life?". Again, the maximum number of responses was set at eleven. This name generator was followed by several name interpreters, preceded by the following text: 'I would now like to ask you to indicate some

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[8] 1) No; 2) Yes.
[9] 1) No; 2) Yes.

of the characteristics that these people, whom you have just mentioned and who helped you by providing support or assistance when you needed it in your daily life, had during the COVID-19 pandemic (when they started helping you).' The name interpreters used, in line with what we have already seen for the alters indicated as people helped by the ego, were as follows: a) Gender; b) Age in years; c) Educational qualification; d) Social circle[10]; e) Help also during this period[11].

For these incoming support ties to the ego, a battery of name interpreters was also administered to identify the content of these support relationships. The strategy used is consistent with that used for outgoing support ties: "In particular, what kind of support or help did each of these people provide you with during the COVID-19 pandemic? (more than one type of support per line)" . Here are the types of help investigated (the relational dimension to which they refer is indicated in square brackets): Money [A]; Other material help, e.g., personal assistance (cooking, personal hygiene, etc.), accompanying someone to a medical appointment, etc. [A]; Information [A]; Reputation and credentials (the fact that you know this person has increased the attention, esteem, and/or consideration you have enjoyed/enjoy from others, and therefore the possibility of achieving your goals: for example, you contacted a professional on behalf of this person who helped you) [G]; Contacts and interpersonal connections (this person introduced you to someone who could help you: for example, they introduced you to someone who became part of your support network and helped you) [I]; This person provided you with the most appropriate strategies to achieve your goals (e.g., in terms of advice, moral or psychological support, reassurance, an opportunity to vent, etc.) [L]; Other (specify: ___).

Finally, respondents were given a name interrelator, designed to reconstruct the direct support links between the alters and the alters indicated by the first name generator to the respondents themselves. Here is the text of the name interrelator presentation with which the collection of relational data

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[10] Text of the name interpreter: "During the COVID-19 pandemic (when they started helping you), this person was, for you (if, in theory, you can indicate more than one answer, indicate the one that appears first in the list: for example, if, for one person, you could indicate both "Relative not living with you" and "Neighbour", indicate "Relative not living with you")". Valid values that can be indicated: 1) Partner living with you; 2) Partner not living with you; 3) Relative/family member other than your partner, living with you; 4) Other person, not a relative, other than your partner and not a care professional, living with you; 5) Relative not living with you; 6) Friend; 7) Neighbour; 8) Work colleague; 9) Association colleague; 10) Other (specify: ___).
[11] Text of the name interpreter: "Is this person also assisting you during this period?". Valid values that can be indicated: 1) No; 2) Yes.

relating to the social support networks of the respondents was concluded: "Overall, during the COVID-19 pandemic, were there any bonds of support or help, in case of need in daily life, between the people you mentioned and towards you from those you helped? Please answer, indicating for each person you mentioned whether they provided support or help, in case of need in daily life, to each of the others listed".

Thanks to the name interrelator, an attempt was made to reconstruct, for each interviewee, the directed graph relating to their ego-centered network (Wasserman & Faust, 1994). for the social support relationships investigated. This information enabled the study of the morphology of the interviewees' personal support networks. In particular, the following were determined for each ego: the outdegree (d_O) and indegree (d_I), i.e. the number of outgoing and incoming support links, and their normalised versions, which vary between 0 and 1, i.e. the outgoing (C_{OD}) and incoming (C_{ID}) centrality indices (Wasserman & Faust, 1994); Freeman's betweenness index (1979), also in its normalised version as a percentage (C_B), which is a measure of the global centrality of ego, i.e. its ability to position itself, as a broker, on the shortest paths connecting the alter; the density of the directed graph (Δ), given by the ratio between the direct links actually activated and the maximum number of direct links that can potentially be activated in the graph, which varies between 0 and 1 (Wasserman & Faust, 1994), also in its ego-centric version (Δ_e), determined by eliminating the ego and, therefore, its links from the graph (Scott, 2000).

4. Results

4.1. COVID-19 vs chronic disease: some distinguishing features

Initially, the analysis focused on identifying any differences in the provision of social support within one's own network between people who had contracted the virus during the pandemic and people who, during the same period, were living with a chronic/chronic degenerative disease. While aware that the number of interviews did not lead to complete saturation of information (Glaser & Strauss, 1967; Bertaux, 1981), some elements of distinction or characterising one or the other condition in the support function were identified.

From the data sheets, it emerges that the group of those who contracted COVID-19 has an average age of 38.75 years and is younger than the group of people with chronic diseases, which has an average age of 51.38 years; most of both groups live with a partner/spouse and children, and overall they have high

educational qualifications and equally high professions in terms of socio-economic status.

Content analysis of the interviews reveals no differences in behaviour or experiences between the two groups regarding offering and/or receiving help. From this perspective, health status does not appear to have any distinctive elements. What distinguishes the two groups, with some interest, certainly has to do with the number of alters with whom they interact in supportive relationships and, above all, with the closeness and residential proximity between the ego and the alter.

Table 3. Health status of respondents, nodes in their networks, and place of residence.

ID Interview	Respondent's health status during the pandemic	Number of network nodes (ego + alter)	Number of relationships with cohabiting relatives	Number of relationships with people who do not live in the same building or flat block	Number of relationships with people in the same block of flats or building, excluding cohabiting relatives	For the ego: d_O C_{OD}	For the ego: d_I C_{ID}
1072	COVID-19	3	0	2	0	2 / 1	1 / 0.5
1059	COVID-19	2	0	1	0	1 / 1	1 / 1
1061	COVID-19	2	1	0	0	1 / 1	1 / 1
1064	COVID-19	5	0	3	1	4 / 1	0 / 0
1069	COVID-19	5	0	3	1	4 / 1	4 / 1
1070	COVID-19	5	0	4	0	4 / 1	3 / 0.750
1060	COVID-19	6	0	5	0	4 / 0.800	1 / 0.200
1062	COVID-19	9	0	3	5	5 / 0.625	3 / 0.375
1067	Chronic disease	12	0	2	9	11 / 1	7 / 0.636
1068	Chronic disease	7	0	4	2	6 / 1	0 / 0.000

1066	Chronic disease	13	0	3	9	10 9 0.833 0.750
1058	Chronic disease	3	0	0	2	1 2 0.5 1
1071	Chronic disease	3	0	2	0	2 0 1 0.000
1063	Chronic disease	3	0	0	2	2 0 1 0.000
1051	Chronic disease	2	0	1	0	1 1 1 1
1065	Chronic disease	5	1	2	1	3 4 0.750 1

Based on the data contained in the network charts, if we look at how the social support and assistance relationships indicated by respondents are distributed in the reconstruction of their personal networks, we note that those who contracted COVID-19 had more support relationships with people living in the same building or block (21 in total) than with neighbours residing in the same building (7) or cohabiting relatives (1). Conversely, respondents with a chronic condition had more social support and assistance relationships with people residing in the same building (25) than with people living elsewhere (14) and cohabiting relatives (1) (Table 3).

Given that the interviews reveal that respondents who were experiencing a chronic and/or chronic degenerative disease during the pandemic period were in a moderate or mild condition in terms of severity, such as well-managed diabetes or cardiovascular disease that had already been brought back to a normal state (Canguilhem, 1966), as reported by the respondents themselves, it is possible to hypothesise that this may have enabled them to provide help and support within the paradox above linked to the ability to be normative even in conditions of illness (Canguilhem, 1966). This phenomenon is even more evident in those who were ill with COVID-19, for whom the number of people who helped them does not exceed those they helped (Table 3).

4.2. The size of support networks: characteristics, differences, similarities

From the qualitative content analysis of each interview, in conjunction with the analysis of the personal support network data, other elements emerged that led us to propose three profiles through which we could highlight elements and

mechanisms that generated or supported social support functions and that sometimes even led to actual caregiving relationships, even if not rationally explained by the interviewees.

These are three profiles constructed primarily based on the size of the networks, i.e. the number of alters identified by the egos and the total number of people who make up each network: these characteristics led to the definition, in relative terms, of small networks, medium-sized networks and large networks, each with its own characteristics, which were then linked to the help provided by the ego to the alters, and sometimes vice versa. For clarity, we offer some paradigmatic examples of what has been discussed.

We identified small networks as consisting of two to three people, including the ego. These networks have quite varied characteristics, although some elements emerge as similar. Six of the seven networks we characterised as small are described by males with a good/very good social position linked to their declared profession. The rest are partly networks of people with chronic illnesses (4 out of 7), most of whom live with their spouse and children (4 out of 7). Two respondents provide support only to friends, two only to relatives, two only to neighbours, and one respondent helps both relatives and friends. The five networks that reveal an average size of between 5 and 6 people tend to be networks described by women (4 out of 5) who fell ill with Covid-19 during the pandemic (4 out of 5), and only one person is a man with a chronic illness. These are networks whose nodes always include relatives and friends, with neighbours appearing in only one of them. Finally, we identified four networks invariably located in southern Italy and characterised by a size of between seven and 13 people. Here, the respondents live with their spouses and children, with three out of four respondents being women. Among these, three belong to third sector associations. All four networks have a strong presence of supportive relationships with and from neighbours. After examining the morphological characteristics of the networks emerging from the network charts and integrating them with the interview content analysis, we selected two support networks for each of the three identified network sizes as examples. In fact, within the three categories of networks identified, there is substantial homogeneity in terms of the networks' structure.

4.2.1   Small networks

Among the seven small networks, we report on subject ID 1071 (Figures 1, Table 4), a 60-year-old man interviewed as a chronically ill patient, who lives with his spouse and children and works in a grocery shop.
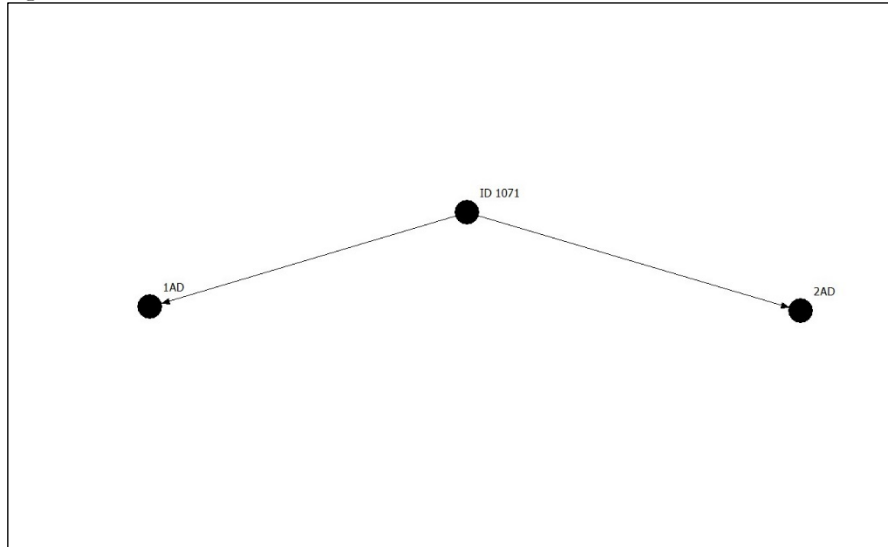
Figure 1. Personal network, interview ID 1071 ⊿=0.333; ⊿ₑ=0; C_B=0%.

Table 4. Network components ID 1071: personal data.

People who have received help from the ego	Age	Relation with ego	Educational qualification	Help provided by the ego
1AD	87	Non-cohabiting relative (father)	Primary licence	Other material assistance
2AD	60	Friend	High school diploma	Other material assistance

Note: if a number precedes the subjects listed in the row, it means that they were mentioned in the network file and contributed to the study of the graph's morphology.

During the pandemic, the interviewee supported his father (1AD) and a friend (2AD). The interviewee's father is an 87-year-old man who lives alone in a rural area without access to a car for travel. He is the person the interviewee visited almost daily during the pandemic to provide material and emotional support, on his own initiative, as he says: "*I knew he couldn't get around, so I didn't wait for him to ask me for anything, I just did it automatically*". The interviewee explains that his father 1AD "*lives in the countryside, so I got him everything I could [...] food because that was the most essential thing [...] then washing powder [...] I left it at the window and we said hello to each other*". On those occasions, ID 1071 states that he also tried to support his father 1AD in terms of morale and emotional state because "*I knew how hard it was for him to be alone*". His son also reassured 1AD about the various media news reports on the pandemic, because he asked me for information (on the health emergency, ed.). [...] I said, "Dad, don't worry, it will end and we'll be fine. Don't worry," [...] I was trying to help him*". The interviewee points out that he has two sisters,

but he was her father's main source of support, given him greater freedom of movement during the lockdown periods. The care and help provided to his father continued even after the pandemic, and at the time of the interview.

The other person the interviewee supports is a close friend, 2AD, who is the same age and lives with his wife and two daughters, described as "little ones". ID 1071 illustrates the relationship as a long-standing friendship with 2AD, whom he is used to seeing or speaking to on the phone daily. During the pandemic, ID 1071 helped 2AD, who was busy with his remote work, especially when all the members of 2AD's family had fallen ill with COVID-19 in succession. This is to prevent his friend from leaving the house and risking infection, which could also affect his daughters (again). ID 1071, therefore, kept in touch with 2AD, helping him with grocery deliveries and communicating frequently with his friend by phone.

ID 1071's support graph is sparsely dense, as there is no link between the two alters indicated, and at the same time, the interviewee does not perform any mediating function between the alters.

4.2.2   Medium-sized networks

ID 1064 (Figure 2, Table 5) is a 44-year-old woman, resident in the North East, employed as an executive in the private sector, with a high school diploma, who lives with her spouse and children. She was interviewed because she contracted COVID-19. ID 1064 provided help to four people and did not receive help from anyone, as she did not ask for help.

During the pandemic, the interviewee helped her sister, brother, a friend who is also her neighbour, and another friend when they all fell ill with COVID-19 at different times. ID 1064 describes herself as empathetic and would have helped people in her network even if it had not been COVID-19. The interviewee provided material support to her 67-year-old sister, 1AD, who has adult children but they live abroad. She also has asthma, so COVID-19 affected her quite severely. At the same time, her sister's husband also became seriously ill. However, he was not listed on the network form, and ID 1064 found herself helping the couple, considering them as a whole, doing their grocery shopping, preparing meals, and delivering them to their home, paying some bills, and resolving minor bureaucratic issues.

Additionally, ID 1064 helped supporting the couple emotionally and psychologically. In fact, she explains that her sister "*well, with two children far away... she already saw herself in the grave... I cheered her up as much as I could [...] I called her (on the phone, ed.) [...]*". The help provided was also intense in material terms, at the explicit request of her sister 1AD, as she herself explains: "*She told me [...]*

not only to do the shopping but also to cook something for her, [...] I felt bad for her because I even thought she was in hospital, so obviously I gave her all the support I could, and obviously I couldn't go into the house [...]. So I could not only bring fresh food, such as vegetables and fruit, but also relieve her because she wasn't feeling well, so she didn't have the strength to do things normally (referring to the sister of ID 1064). Like a prisoner, I cooked at my house and brought it to her behind the door".

Figure 2. Personal network, interview ID 1064, $\triangle$ =0,200; $\triangle_e$ =0; C_B =0%.
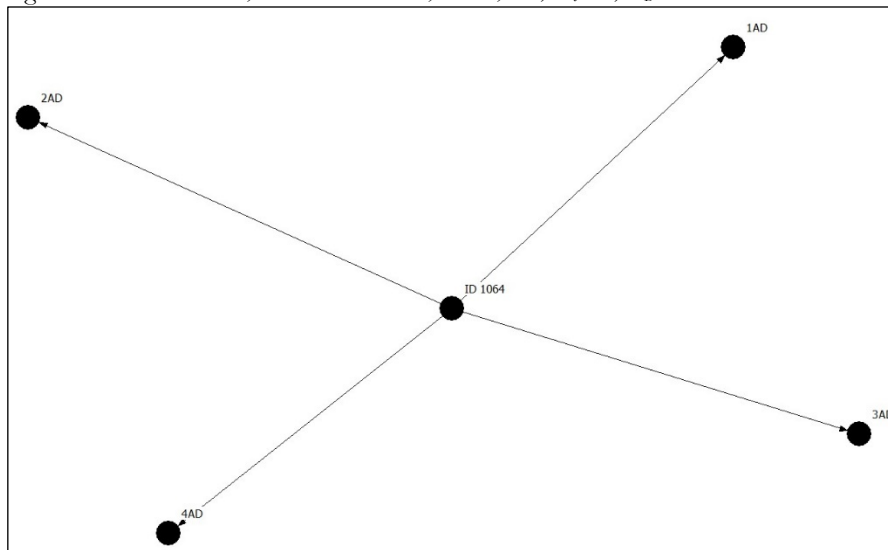

Table 5. Network components ID 1064: personal data.

People who have received help from the ego	Age	Relation with ego	Educational qualification	Help provided by the ego
1AD	67	Non-cohabiting relative	High school diploma	Other material assistance
2AD	50	Friend	Middle school licence	Other material assistance
3AD	60	Non-cohabiting relative	Bachelor's degree	Other material assistance
4AD	52	Friend	High school diploma	Other material assistance

Note: if a number precedes the subjects listed in the row, it means that they were mentioned in the network file and therefore contributed to the study of the graph's morphology.

Similarly, ID 1064 also helped her 60-year-old brother, 3AD, when he fell ill with COVID-19. Her brother, who lives alone, does not explicitly ask his sister for help, but she takes it upon herself to help him by preparing meals for him and bringing them to his home, buying medicines, and grocery shopping.

ID 1064 explains that she took the initiative "*as a mother, that is, immediately; I am an interventionist in this regard*". As mentioned, the interviewee also helps two other people: a friend/neighbour, 2AD, described as "*someone I trust blindly*", and a 52-year-old friend, 4AD, who is immunocompromised due to rheumatoid arthritis and lives in a household with very elderly people who are particularly vulnerable during the period in question.

For both interviewees, she takes action to provide them, upon request, with medication to manage the symptoms of COVID-19 and swabs to test for the presence of the virus, as well as entertaining them "*with long phone calls*" to help them emotionally, since, according to her, "*listening is important, it is fundamental, and in my opinion, in psychological support, it is useless to set oneself up as a life coach [...]*". From a morphological point of view, this interviewee's graph is shaped like a star, with only outgoing links from the ego. Because of this characteristic, the graph does not allow the ego to act as a broker.

4.2.3   Wide networks

A paradigmatic example of a vast network comes from interview 1066 (Figure 3, Table 6), a 22-year-old woman interviewed because she has a chronic illness. She describes a support network that includes family, friends, and neighbours. ID 1066 lives in the south, is an executive employee in the private sector, and has a high school diploma. The interviewee describes her support network as consisting of people living in the same building, except for one friend who lives nearby.

During the pandemic, ID 1066, who is married with a daughter, a few months old, helps her mother and brother, who live on the third floor of the building, her father, grandmother, and cousin who live on the sixth floor, and a couple with a 6-year-old son who live on the fifth floor, the same floor as the interviewee. ID 1066 does the grocery shopping for her mother and brother and cooks for them. In return, they take care of her niece and comfort her when she has difficulty managing her daughter, who is a few months old. When situations arise that cause ID 1066 anxiety, such as episodes of colic or inconsolable crying, "*they reassured me and gave me a lot of support*". The interviewee's words reveal a relatively close relationship between the three, who materially and emotionally support each other. The interviewee says: '*Not only practical support, but also psychological support [...] they helped me a lot with the baby. [...] when I could, I obviously did the shopping [...] if they looked after the baby [...] my husband and I… we both went down and did a single shop for the whole building [...], or who would cook for everyone. I would cook and go downstairs and take it to them. [...] So let's say it was a material help, with food or other things*".

Figure 3. Personal network, interview ID 1066, ⊿ =0.314; ⊿ₑ=0.227; C_B =43.371%.
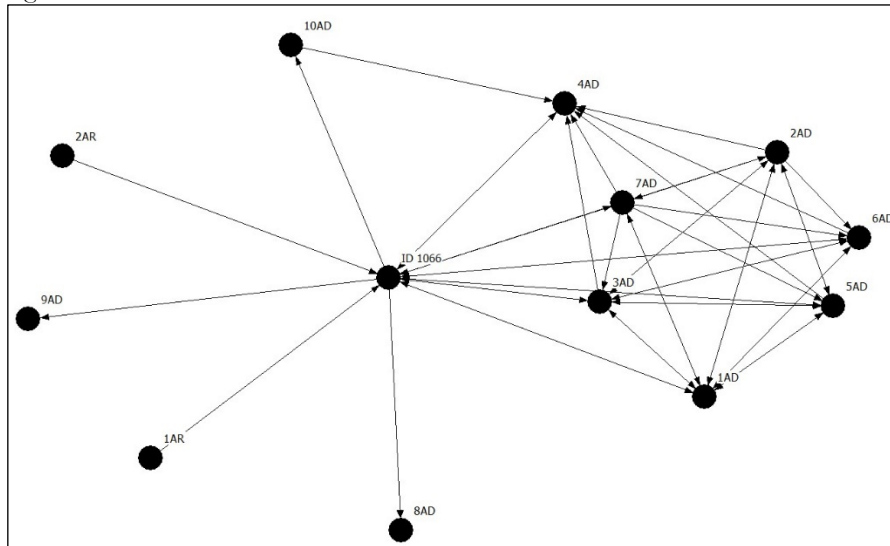
Table 6. Network components ID 1066: personal data[12].

People who have received help from the ego	People who have provided help to the ego	Age	Relation with ego	Educational qualification	Help provided by the ego	Help received by the ego
1AD		27	Non-cohabitating relative (brother)	Bachelor's degree	Other material assistance	
2AD		55	Non-cohabitating relative (mother)	Bachelor's degree	Other material assistance	

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[12] About the nodes of the network and its representation, it should be noted that the interviewee, in the network chart, indicates "I prefer not to answer" regarding the existence of a helping relationship between 4AD and 1AD. She noted no help from 4AD to 1AD and did not indicate anything regarding help from 1AD to 4AD. Our initial decision was to remove the two nodes from the network, given that it was unclear from the interview whether there had been any help between them. In this case, we would have had a missing entry in the network table. However, given the extreme relevance of these two subjects within the network revealed by the interview content analysis, we opted for a non-conservative choice and, therefore, we produced the network and its construction considering the missing data as an absence of a link.

3AD	56	Non-cohabitating relative (father)	Middle school licence	Other material assistance	
4AD	56	Non-cohabitating relative (Partner of her father)	High school diploma	Other material assistance	
5AD	31	Non-cohabitating relative (cousin)	Bachelor's degree	Other material assistance	
6AD	87	Non-cohabitating relative (Grandmother)	Middle school licence	Other material assistance	
7AD	50	Neighbour	Data not available	Other material assistance	
8AD	50	Neighbour	Data not available	Other material assistance	
9AD	70	Neighbour (relative of 7AD and 8AD)	Data not available	Other material assistance	
10AD	23	Friend	Bachelor's degree	Other material assistance	
1AR	35	Friend (via 2AR)	Bachelor's degree		Contacts
2AR	27	Friend (via 1AD)	Bachelor's degree		Other material assistance
From interview	Data not available	Partner – not reported in the network file	Data not available	Data not available	Other material assistance

Note: if a number precedes the subjects listed in the row, it means that they were mentioned in the network file and therefore contributed to the study of the graph's morphology. "From interview" means that people were mentioned exclusively in the interview and they did not contribute to the study of the graph's morphology. For the cells in grey, the questionnaire did not allow data to be collected, as already explained in paragraph 3.

Emotional social support was essential, as she recounts: "*We would talk, and once we had let off steam, we would start laughing. So the distraction... it was spontaneous [...] it was all very natural [...] we have always been like that*". In the interviewee's words, what helped most from this point of view was "*above all, distraction. Even though I felt bad then, we were each other's distraction because it was just us*".

The interviewee's father, 3AD, also lives on one of the floors of the building and helps his daughter financially when her husband cannot work due to the pandemic. The interviewee recounts: "*We found ourselves with a small child at home (she and her husband, ed.). So financially, he (the father, 3AD, ed.) helped us a lot with the high costs of nappies, milk [...] medicines, so from a financial point of view, my father has been a pillar of support*". About her parental network, the interviewee receives both material and psychological support from her brother 1AD and her mother

2AD and provides social support in the form of material assistance to her parents, 2AD and 3AD, her brother, 1AD, her cousin, 5AD, and her grandmother, 6AD. The latter is reported as a person helped by the interviewee, who explains how the 87-year-old woman was protected because she was frail, having suffered a stroke shortly before the start of the pandemic.

1AD, 2AD, 3AD, 4AD, 5AD, and 6AD constitute a parental network where each member helps the other (Figure 9) through material assistance. This part of the network also includes an alter with no family ties with others or the ego. This is 7AD, a neighbour connected to 3AD in a relationship of assistance provided. The network also includes a couple of neighbours, their 6-year-old son (not shown in the network chart), and an elderly relative, 9AD. The latter is also shown in the network chart and is mentioned in the interview, but she appears to be a figure who is one with the couple of neighbours, 7AD and 8AD.

The interviewee supported her two neighbours, 7AD and 8AD, by assisting with grocery shopping and looking after their son. She says: "*If my little girl were asleep and they needed some rest, I would take him (the child, ed.) here. I played with him*". In return, the couple offered to run some errands when they had to leave the house, as the interviewee explains: "*They started (offering help, ed.), to be honest, because knowing about the little girl, they rightly said, 'I'm going out, do you need anything?', or maybe they went to the chemist's if something was needed. I have to say that they were the ones who asked first*".

The relationship is described in this way by ID 1066: "*We have known each other forever, but our intimacy is limited*". In fact, at the end of the interview, ID 1066 states that what happened during the pandemic intensified their relationship compared to before the health emergency. Part of the network is made up of three friendships. The interviewee helped and was helped by her friend 10AD, described as her "*best friend*", a 23-year-old graduate who worked in a shop and offered to look after the interviewee's daughter. The interviewee reciprocated by bringing her lunch to work or looking after her dog and spending a lot of time with her, both in person and remotely. Among her friends, there is also 2AR, a friend of the interviewee's brother (1AD), whom she knew before the pandemic and who is introduced as follows: "*She was much closer to my brother, as is only right, but I must say that we managed to have coffee, chat and take a break together, for better or worse*".

2AR proves essential in helping the interviewee deal with some issues regarding the health of her daughter, who explains, "*[...] Obviously, she knew what was going on around the hospitals and doctors' surgeries, so she told me not to let the little one out of the house*". 2AR therefore acts as an intermediary between ID 1066 and 1AR, 2AR's sister and a pediatrician. The ID 1066-1AR relationship is a good example of a relationship in which help is linked to reputation and credentials, contacts, and knowledge. It is created *ad hoc* to meet the interviewee's needs.

1AR, therefore, in line with her professional skills, lends a hand to help the interviewee: "*1AR reassured me as much as she could [...] she made countless visits (to my daughter, ed.) [...] Then there was a moment when she (the child, ed.) wasn't paying attention, you called her and she didn't always turn around. I started saying that she might be autistic, that she might be deaf, that is, they sent me into a tailspin, and so she came, examined her, and reassured me: "Don't worry, you see, the child is reacting". In short, she reassured me*".

From a morphological point of view, this support network has a substantially low overall density, but it is almost identical to the ego-centric density. This state of affairs should be interpreted in light of the ego's ability to perform the broker function to a considerable extent in a network that nevertheless has a high connection between a significant number of 7 alters, who all live in the same building as the ego.

Concerning this network, in addition to the characteristics indicated for the type of networks that we define here as wide, it is necessary to highlight another feature in particular, which we have already emphasised in the description of the network in interview ID 1067 and which is present in all the interviews from which we have identified personal support networks that we have defined as wide: what emerges, in an almost identical way, among wide networks is the issue of residential proximity. These are networks of people who live in apartment buildings or other shared accommodation with the people they help, who move between floors and landings, and who are constantly active, often in both directions, in providing help.

4.3. The view of professionals on personal networks

What was reported in the interviews with the group of 16 subjects and described through information on personal networks corresponds to what emerged from the interviews with professionals (Table 2). The latter observed, directly or by listening to their patients or users, that informal networks had been reorganised, especially family and neighbourhood networks. In this regard, a general practitioner working in the country's south explains: "*I'll tell you what I've heard. We've seen more, for example, of people helping each other with shopping, medicines, acting as mediators with doctors, and other things like that. But this is something that has worked as a basic thing. I mean, of course, it was bound to be that way. There was no doubt about it (about the city where she works and the local culture, ed.)*" (interview 1081).

Similarly, a social worker (interview 1084) from the North West adds, "*And then we saw families reorganising themselves. Here's the thing: families with children with disabilities reorganised themselves [...] Families with children with disabilities, children who were not very young and without adult with disabilities who devoted themselves more to their*

younger siblings. And so we also thought, "Look, it took a pandemic to bring out greater skills in families". The pandemic and being in a personal network in situations of need then led to forms of material help, as the social worker herself describes: *"One of the parents who was at home a bit more, or the older brother or sister, without even disrupting their lives, could at least take care of the paperwork related to this situation (the presence of children with disabilities in the family, ed.), as well as providing company and accompaniment.* The same phenomenon is observed in the North East, as a social worker confirms that *'It is precisely at a more personal level that we have seen the activation of a good support network at the neighbourhood level".*

As seen above, personal networks have changed or reorganised to protect the most vulnerable, as the social worker explains (interview 1084): *"But the most vulnerable were the most exposed. And so, if the most vulnerable member of the family was a small child, a child with disabilities, or an older adult [...] and the hospital was more frightening than home. Why go to the hospital? And then who comes there? Who comes out of the hospital? It's the same thing. "Let's help each other" [...] there was more of an idea of "let's help each other" because, if we go to the hospital, we won't see them again. Let's stay together, because everything else is worse".* Alongside this, the pandemic has had an impact on healthcare facilities, as the social worker explains, while describing the difficulties of working in the community during a health emergency: *"(today, ed.) in principle, the home is the primary place of care [...]. Hearing this from hospital consultants is revolutionary, because previously the hospital was the primary place of care".*

Still on the subject of protecting elderly or otherwise vulnerable people, a general practitioner (interview 1083) points out a different aspect of the issue, which nevertheless affects the organisation of support networks: *"Those who were immobilised at home, I am thinking of elderly people, were perhaps the ones who were at least risk at that time, because they had no contact with others, but there were, for example, carers who became a vehicle [of contagion, ed.] or the carers themselves, the children, relatives and grandchildren of elderly people who were no longer carers but became a danger; so a situation of conflict arose, even, let me say, emotional conflict: "the person appointed to come and help me can become my killer". This was the general feeling and atmosphere created"* (interview 1083).

Despite this, professionals have noticed an emerging effect attributable to the pandemic in terms of helping behaviour, including mutual help, within personal networks, as described by the group of 16 interviewees. One general practitioner recalls, *"Now that you mention it, while there wasn't much of 'I'll take my neighbour to the doctor's, to get tests done', there was a bit more of this aspect related, for example, to everyday life, so "I go shopping with someone or someone goes shopping for me", yes, this is something that happened more often, and this someone could actually be a neighbour or an acquaintance or a friend. So, my neighbour went to get me some bottles of water because they're too heavy for me, or I'm at home with Covid, and my neighbour leaves my medicine on the doormat, yes, I didn't notice that before, but now you've made me think about it. [...] If,*

on the other hand, we are talking about my neighbour ringing my doorbell or calling me and saying, "Look, I'm going shopping" or "I'll go to the chemist's and leave your medicine on the doormat", this has happened, yes, this has happened. We can say that this happened because of or thanks to COVID. Before, this either didn't happen or we weren't aware of it. It certainly happened less often or didn't happen at all. The Covid period was also a period when some people tried to get in touch and help each other" (interview 1083).

The neighbourhood is a variable that has also been observed in relation to what another general practitioner says (interview 1080): "*The neighbours, more than anything else. The carers, too. [...] It often happened when entire families were ill, especially before vaccination [...] and the neighbours stepped in and did everything themselves. [...]*". Still on the subject of the helping relationships observed during the pandemic, one general practitioner is keen to point out that, according to his observations, this was an experience that did not lead to new relationships (interview 1083): "*For many of my elderly patients, I did not see [...] any improvement in relationships, no friendships that may have developed during the pandemic period. However, even after the pandemic, I saw a greater number of carers, as if this role had been entrusted to third parties*". Similarly, among the 16 interviewees, it was noted that existing relationships had intensified and that very few new relationships had been formed due to the pandemic.

About other forms of assistance, such as strategies, which we have previously defined here as the most appropriate strategies for achieving objectives, for example, in terms of advice, moral or psychological support, reassurance, the opportunity to vent, etc., a social worker explains that "*There has been very concrete action on activities such as shopping, purchasing medicines, maintaining daily relationships with people in clear situations of isolation, and mutual support via telephone. That's it. There is also mutual help between neighbours and acquaintances, for example, on how to use income support tools. So, giving advice, circulating information. "Look, I was told: Go there, you'll get help". So, solidarity was activated... I didn't see any fragmentation, but perhaps a regrouping in response to the difficult situation unfolding*" (interview 1085).

It is also necessary to take into account a common feeling that is expressed across the board by professionals, namely that what happened, the reorganisation of networks, the aid and support measures, has all come to an end and been forgotten, whether deliberately or not: "*Now it's more difficult with the neighbours, the carers are still there. [...] They have returned to normal, they have forgotten everything.*" (interview 1080); "*then the really bizarre thing is that at the end of the pandemic it was as if nothing had happened, we went back to how it was before, without these changes having any impact on relationships*" (interview 1081); "*I have the impression, however, that this kind of solidarity we are talking about is fading away a little; it doesn't seem to me that it is being maintained. Once the emergency is over, everyone goes back behind the curtains of their balconies*" (interview 1083).

5. Discussion

The combined use of personal network analysis and in-depth interviews, with respect to the specific target group identified for this part of the research, was beneficial in some cases in bringing to light relationships with cohabiting relatives, particularly partners/husbands/wives, and with children, especially if they were very young and not yet fully independent. These individuals were present in the interviews but absent from the network charts. Their presence is active, i.e. they are nodes in the network who are helped, as is the case with minor children, for example, or with the minor children of neighbours. They are nodes in the network who provide support, particularly partners, who are understood as husbands or wives.

One possible reason for this could be that, compared to the COVID-19 pandemic period, respondents filled out the network form mainly with the help provided or received from outside the family network in mind. This omission is present in some interviews. In addition to the support networks of ID 1066 and ID 1067, as we have seen, differences also emerge concerning other interviewees. The network chart of interviewee ID 1051 does not include his wife, from whom he received material help and strategies; Interviewee ID 1062 does not consider his primary school-aged daughters, whom he looked after daily during lockdown, or his neighbour's daughters, who are the same age as his own and whom he hosted in his home while his neighbour was at work, also during the pandemic, to be part of his network. Furthermore, the wife of respondent ID 1062 does not appear in the network chart, despite having supported her husband when he fell ill with COVID-19 and she cared for him; respondent ID 1063 does not mention his father, who helped him with the two alters reported in the network chart, as emerges from the interview; respondent ID 1072 indicates his parents as alters in the network, but the interview reveals that he helped his wife and son when they contracted COVID-19 and also that his wife supported him when he himself fell ill with COVID-19. It would seem, then, that the help exchanged between ego and alter who have a parental relationship or who are linked by a couple relationship was perceived, in some cases, as something that was, in a sense, taken for granted, leaving a lesser trace in the memory of individuals, who mention it only when they are the subject of a more in-depth and qualitative survey.

However, it is necessary to carefully contextualise what has been identified about the complementarity between the two research tools used, which emerged in relation to a specific research condition, characterised by: (i) the study of aid at a time of severe global health crisis, linked to critical events that go far beyond health alone (economic problems, in terms of sociality and social

integration, etc.); (ii) the study of the dynamics of support for individuals who were experiencing compromised health conditions.

None of the respondents identified themselves as caregivers, as defined by Istat (2022), which recognises the central importance of the condition of the person being helped. However, we note that all respondents have in some way acted as caregivers, as defined theoretically by Tronto (1993), because they identified needs that could be met mainly through material assistance (caring about). They took responsibility for meeting those needs (taking care of). They provided practical help with the skills required by social distancing rules (caregiving).

More generally, thanks to the privileged witnesses for the strictly healthcare field covered by this part of the research, we observed that, during the COVID-19 pandemic, no new relationships were created, but rather existing ones were reinvigorated. Furthermore, with the onset of COVID-19, family relationships became even more focused on providing help. In addition to these relationships, neighbourhood relationships also played a supportive role. In contemporary society, as highlighted by Di Nicola (2017, p. 67), "roles within the family are less interdependent: elderly parents and children, husbands and wives tend to be less tied and conditioned by constraints of dependence, especially in material and economic terms [...] family cohesion is increasingly less obligatory [...]". During the pandemic, our analysis shows that family cohesion and dependence between family members have intensified, both in material and more expressive terms. This strengthening also affected relationships between parents and adult children, in the more general sense of an "intimate and close relationship of almost equal exchange", in line with Di Nicola's reflections on the contemporary family and its differences from the past (2017, p. 68). The interviews reveal how the pandemic has renewed the centrality of blood ties in family networks, which have often acted out of love, intimacy and emotional well-being, understood as the cornerstones of the bond that holds the contemporary family together, in its being an affective family (Di Nicola, 2017).

Social distancing rules, lockdown periods and the general emergency have hindered the formation of new relationships and led people to remain within very narrow domestic boundaries. Apartment buildings or blocks of flats seem to be a middle ground, where there is a particular possibility of movement and communication that has allowed neighbourly relationships to remain alive. We have also seen intergenerational bonds strengthened through practices of care and protection of oneself and others from COVID-19, demonstrating close, emotional ties, personal trust and a sense of belonging, even though the instrumental component has always remained in the foreground. However, this

has not meant a devaluation of the bond; on the contrary, as explained in the interviews, it has intensified.

Health conditions did not interfere with support actions, i.e. even in poor health, people took action to help relatives, friends and neighbours in need: the health emergency may have acted by recalibrating the perception of the severity of the conditions of those who, during the pandemic, had a chronic illness, and this may have allowed them to act despite the need for greater self-protection compared to healthy people.

Beyond personal motivations and propensities to act towards others, one aspect that seems to have made a difference in the internal dynamics of our interviewees' helping relationships is strongly connected to the morphological dimension of their personal support networks. The research shows quite clearly how the more bridging, i.e. more open, networks, in which the ego acts as a broker, have achieved greater breadth, providing individuals with a greater amount of social resources during the pandemic and, therefore, a greater sense of well-being.

6. Conclusions

In this article, we looked at how COVID-19 affected the social support networks of people who got the virus and those who had chronic illnesses during the pandemic.

Although the results of this study cannot be generalised, they allow us to observe that, despite social ties being primarily understood as channels of contagion during the pandemic, social support relationships were not lost, and individuals relied on their social resources, i.e. social support in its various dimensions. These were each identified for their own characteristics, but did not act separately, as they were concretely intertwined and integrated into everyday experiences, when, for example, material social support also functioned as emotional social support, or when the most appropriate strategies for achieving a goal also solved a material need. This information on the link between the different forms of help emerged from the interviews. Still, the first prompt came from the administration of the network form, constructed using the relational version of Parsons' AGIL scheme, applied to the study of social resources, which collected and expanded on the solutions of House (1981) and Cohen & McKay (1984).

Investigating social assistance and support practices using quantitative and qualitative research techniques has provided an in-depth understanding of how social support networks have been tested and how they have organised themselves to deal with health emergencies. In this context, about social

support, as argued by Cohen (1992), the quality of relationships proved to be as important as quantity, and this clearly emerged whenever respondents explained that, despite social distancing rules, existing positive social relationships had intensified precisely through the actions of social support provided and received. The restrictions imposed by the health emergency have forced certain behaviours which, for the general population, have hindered movement and social relations, but this, as also emerges from the data and narratives, meant that people essentially maintained contact with those they could meet, either because they had the opportunity to do so, such as relationships between neighbours, or because it was their specific desire and need, such as relationships of material social support between relatives who did not live together.

The conclusions reached here were also supported by the testimonies of professionals, social workers and general practitioners, who provided a series of contextual observations consistent with what was reported in the interviews and which concern precisely the reorganisation of networks, the activation of social support behaviours among friends and neighbours, and the protection of vulnerable people. However, all this was essentially limited to the pandemic period and, in their opinion, has reverted to pre-pandemic behaviours.

Residential proximity contexts have expanded the ability of individuals to take on the role of brokers in their personal support networks and, in this way, to expand them significantly. The expansion of the support network, guaranteed by brokerage, has led to a greater sense of well-being. This is one piece of evidence, among others identified, that clearly highlights the mechanism of mutual determination between structure and agency, in line with what is generally expected from a structural interactionist perspective (Degenne & Forsé, 2004).

A critical element of this research work is that the two different research tools used, namely the network chart for personal network analysis and the interview, do not produce perfectly comparable results about the consistency of the individual support network identified. This leads to the obligation to use the two tools in a combined and symbiotic manner, which is a rather complex practice, given the complexity of the analysis that results from it.

A further critical issue is inherent in the non-generalisability of this study, which nevertheless produces interesting information on specific mechanisms capable of connecting structure and agency, thus providing hypotheses to be corroborated/falsified in census surveys or surveys carried out on representative samples of specific populations of individuals.

Funding

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