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# Conflicts and Alliances in a Spinal Cord Injury Community: Premises for a Good Rehabilitation

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## Abstract

The aim of this research is to identify the characteristics of interpersonal and social relations that are established within the Spinal Unit of the "San Raffaele, Sulmona". The methods that have been used are "Sociogram" by Moreno as well as individual interviews, direct and indirect observation. The sample is composed of 15 para- and quadriplegic patients of the Spinal Unit (6 females and 9 males). From the sociogram and the analysis of the leader's and the refused member's personality characteristics we were able in the first place to identify the difficulties of the spinal group, and also to structure future interventions to decrease the difficulties and aid compliance to treatment, rehabilitation and quality of the Department life.

**Keywords:** Spinal injury; Rehabilitation; Sociogram; Group rehabilitation; Interpersonal relationships

## Introduction

When we debate about a group, we should think about it as a dynamic process, rather than something static. This process includes group dynamics, psychological and personal experiences that are the essence of the group itself. Members of a group share a certain dose of cohesion, which is the degree of solidarity among themselves [1]. Socialisation is an important aspect of microsociological reality, and it has the following purposes: a) to achieve a level of security offered by the membership to the group that allows avoiding a high level of anxiety when exploring new contexts; b) control of the dynamics of guilt because the paternal super-ego turns into a more controlled group super-ego; c) the acceleration of learning processes because the group represents a continuous feedback through the comparison with the other members, and therefore it's a mean to learn what results are achieved time after time; d) increasing the efficiency and functionality of the defences because, according to the "law of success" within the group, there should be a boost of the mechanisms that have a positive effect, while those that have failed in their purposes should be abandoned; e) the changing in the intellectual development because of the existence of a relationship between intellectual processes and language, and between language and communication which is enhanced in the group; f) the facilitation of the emotional maturity in the group, compared to the isolated condition [2].

The sociogram is an important instrument to learn the complex and complicated dynamics of interpersonal and social relationships that intervene in the life cycle of the group.

The sociometric test created by Moreno (the founder of sociometry) allows obtaining a detailed map of the relationships among the group and it's able to identify the social status and the psychological dynamics of the individual and the group. The sociometric test, therefore, is useful to have a clear image of the relationships within members of a group and to detect characteristic features of individuals' personality [3].

The sociogram must represent the phase of a complex process that leads to changing. It's important in those cases where there are conflicts among the group. The administration of the sociogram leads every member to avoid an attitude of apathy towards a situation considered to be unchangeable and to show a better attitude towards the figure of the psychologist, often seen as a negative figure whose help is needed when a person is considered to be "crazy" [4].

The idea to use a sociometric test was born to deepen the knowledge of the dynamics of the "Spinal Unit" of the Institute San Raffaele-Sulmona, in order to plan a structured and scientific intervention.

## Aim

The patient with spinal cord injury (SCI) has to live, after the trauma, in a rehabilitation community for a long time (about six months in repeated cycles), in which establishes functional relationships with other subjects.

SCI implicates various psychological problems such as repeated thoughts and anxiety that brings individuals to feel overwhelmed as soon as they realize the condition in which they are, and this process influence the relationship with themselves and others. The most important conditions are disbelief, rebellion and depression towards the new situation. In a spinal unit these patients share common problems, and these lead them to form a group where different dynamics and role playing are observed. This step is crucial to the rehabilitation.

In a spinal unit, the patient is received by a team composed by a psychologist, a physician, a rehabilitation therapist, a nurse, and a social worker. After the conversation with this team, the administration of a sociometric test could be useful. The examined aspects should be:

- The affective aspect-relational, which is referred to living together or being together. The configuration of the interrelationships that is obtained refers to emotional relationships that are based on psychological affinity and not to individual practical skills;

- The aspect related to the hierarchical organization of the group, which aims to have information on who could play leadership or management roles.

- The importance of the administration of the sociometric test in the Spinal Unit of the "San Raffaele, Sulmona" lies in identifying:

-the relationships and roles of the subjects in spinal units;

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-personality characteristics that facilitates or not the integration in the community;

-individual personality traits;

-the quality of interpersonal relations.

Once these goals are reached, it will be possible to structure different interventions on the group in order to improve the quality of its life, through various actions:

- Facilitate the cohesion of the group;

- Reduce relational difficulties (e.g. how to integrate a marginalized member with the rest of the group);

- Promote individual characteristics (e.g. increase self-esteem);

- Increase the quality of relationships in order to improve psychological well-being and rehabilitation.

## Sample

The sample is composed of 15 participants, where 42% are female (6 subjects) and 58% are males (9 subjects). Age ranged between 14 and 61 years. The average age is 35.5 years.

## Materials and Method

The sociogram consists of four questions. The first two refer to the principle "choice/repulsion" identified by Moreno. The third and the fourth question aim to investigate the capacity that the subjects have to represent themselves in the group. Answers may have an unlimited number of options and follow the order of preference. The subjects will be identified with a colour to ensure anonymity.

These questions are:

1) If you were to organize a dinner in a pizzeria, who would you prefer to be seated next to you?

2) If you were to organize a dinner in a pizzeria, who wouldn't you prefer to be seated next to you?

3) Among your friends, who do you think have chosen you in the first question?

4) Among your friends, who do you think have chosen you in the second question?

A participant must fill-out the test by himself and must not tell the answers to the other participants. For quadriplegics subject, the test compilation is done with the psychologist help. A computer program has been used (i.e., SocioSoft software) to have a quick statistical data elaboration and a graphic of individual and group results.

## Results

The sociometric test has allowed to obtain a detailed map of interpersonal relationships and to identify the social status and personality characteristics of individuals within the Spinal Unit of the institute "San Raffaele Sulmona".

Sociosoft software has been used for the interpretation of sociometric data, through an elaborate and precise analysis of sociometric matrix, that allows obtaining a high number of information regarding:

-Indexes related to the social status of the individuals within the group;

-The type of the observed relationships within the group.

Individual indexes are the following:

- Expansiveness index is represented by the relationship between the total number of choices (C) expressed by individuals and the total number of refusals (R) expressed by the subject. When the expansiveness index (C/R) is less than 1 (<1), it acquires a negative value, while when it is major than 1 (>1), it acquires a positive value.

- Status of perception index in choices that is given by the relationship between the numbers of choices that the individual believes has obtained and the number of choices actually obtained. An individual has a good perception of the quality of his relationships approaching others (choices) the more the value of this index approaches 1.

- Status of perception index in refusals that is given by the relationship between the numbers of refusals that the individual believes has obtained and the number of refusals actually obtained. An individual has a good perception of the quality of his relationships separating from others (refusals) the more the value of this index approach. 1. Index of particular interest is related to the cohesion of the group, that is, the relationship between the total number of reciprocal choices and the number of individuals in the group. In our case the group has obtained a good index of cohesion. In our sociometric survey, we considered three types of actors, three roles that have a particular importance within the group:

1) Popular participants (leaders), those who have received a significantly higher number of choices;

2) Isolated participants, those who have received a significantly lower number of choices;

3) Refused participants, those who have received a significantly higher number of rejects. They were obtained through the use of an "enhanced index" that allows to deepen the qualitative aspect of interpersonal relationships, giving importance to the order of preference of expressed choices and refusals. What we did was creating a ranking of values that gives a maximum score to the choice expressed in the first position, and lower scores shifting positions. The sociometric status is defined by two aspects:

- Popularity/isolation

- Acceptance/exclusion

What we observed in the group is:

1) M.=Popular participant: the one who has received a significantly higher number of choices, so it is believed to have more influence or power in the group.

| M. chooses 2 members | 8 members believes they have been chosen by M. |
|---|---|
| M. refuses 2 members | 1 member believes he has been refused by M. |
| M. believes he has been chosen by 2 members | 9 members choose M. |
| M. believes he has been refused by 2 members | 0 members refuse M. |

The expansiveness index (2/2) is equal to 1, so it acquires a positive value. We can say that M. is emotionally oriented to the others and he's ready to experiment new relationships. Status of perception index in choices (2/9) is equal to 0.2, this means that M. believes he has been chosen by two members, when in fact he was chosen for nine times. M. does not have a good perception of state.

Status of perception index in refusals is equal to 1; this means that M. is capable of representing himself in the group.

2) O.=isolated participant: the one who has received a significantly lower number of choices.

| O. chooses 2 members | 2 members believe they have been chosen by O. |
|---|---|
| O. refuses 0 members | 0 members believe they have been refused by O. |
| O. believes he has been chosen by 1 member | 2 members choose O. |
| O. believes he has been refused by 1 member | 0 members refuse O. |

.In this case, the expansiveness index (2/0) is equal to 0, so it acquires a negative value. O. in this case it is not oriented towards the others, so he is not interested in experiencing new relationships. Status of perception index (1/2) is equal to 0.5, a negative value, which indicates that O. is not able to perceive his role within the group.

Status of perception index in refusals (1/0) is equal to 0, acquiring, again, negative value, which indicates that O. is not able to represent himself within the group. O., in our analysis, proves to be the ignored subject, who is not refused by other members, but he tends to isolate himself by not expressing choices and refusals towards his companions, so he is the passive person who does not give any contribution to group life.

3) X.=refused participant: the one who has received a significantly higher number of refusals.

| X. chooses 2 members | 3 members believe they have been chosen by X. |
|---|---|
| X. refuses 1 member | 7 members believe they have been refuse by X. |
| X. believes he has been chosen by 2 members | 3 members choose X. |
| X. believes he has been refused by 2 members | 8 members refuse X. |

X. believes he has been refused by two companions, while in reality 8 companions refuse him. This indicates that X. is not able to represent himself within the group. Furthermore, 7 members believe they were refused by X., further indication that X. is not accommodating towards others, showing an attitude of closure and rejection.

The problem of leadership brings with it an evaluation of the differentiation of roles within the group. We can thus identify, together with those who carry out tasks of leaders, individuals who are not leaders, but they show leader behaviours: they are quite capable of creating positive relationships with others; they show that they get preferences from the other members, and they are quite serene. Another category is the one of the followers, those who follows the "leader" or the "non -leaders with a leader behaviour" in a passive way, adapting to choices and desires of others.

Moreover there are isolated individuals, who belong to the group in a marginal way, who share a group identity in a non-critical way and start weak and sporadic relationships. It is important to identify the isolated subject in order to integrate him with the rest of the group.

Finally, there are the refused members that "opposes" themselves to the group itself, who eventually takes distance from him.

Through the administration of the sociogram in the Spinal Unit of the "San Raffaele Sulmona", it was possible to identify the role of the leader and the role of the excluded. The evaluation was also followed by the direct and indirect observation of the psychologist, deepened by individual interviews with the subjects, to better define the respective personality profile.

In our case the leader is represented by M., chosen by almost all subjects, the absolute protagonist of the desire of the community members to be chosen by him. M. is a young quadriplegic boy.

M. is a permissive leader, laissez-fair [5], that is, he is willing to accept the ideas and creativity/personality of the other, exerts his power in a passive way, leaves to the group full freedom, merely indicates the available means, gives willingness to intervene if requested, does not interfere, he doesn't evaluate the activities of the group, he has the role of a friend.

M. has great sensitivity and charisma, he is emotionally pleasant and he has acute intelligence. Unfortunately M. is also characterized by a low self-esteem, he suffers in a very deep and unconscious level the "castration anxiety", in fact, despite being the leader, he does not perceive his importance within the group, thus he's not able to entirely exert his role.

The excluded one (the refused) is represented by X., rejected by almost all the patients of the department and the protagonist of others' fear to not be accepted by her. X. is a young paraplegic woman. X. has an attitude of closure and mistrust of others. She shows classical narcissistic style behaviour, which indicates, in this case, low levels of self-esteem and feelings of inadequacy. X. hides these issues with defense mechanisms such as projection, and displacement. X. is unable to represent the reality of her condition, thus, she refuses contacts with the community to defend herself from the anxiety and the conflict that an increased self-awareness would cause [6-9].

Nevertheless X. has a strong autonomy, developed precisely because she couldn't accept to depend by others. Therefore, X. could be a valuable resource and an excellent point of reference for the group.

The analysis of sociogram, direct and indirect observations and interviews, so far examined, allow us to make some concluding and important remarks on the present and future relational dynamics that can have impact on an intervention project for the optimization of the rehabilitation service.

## Discussion

Y., as previously observed, appears to be a permissive leader, where productivity is low and the members of the group work little and bad, so the time is not used optimally. Y. is more oriented towards socio-emotional dynamics than to the tasks which, in our case, are physical therapy, gym and pool activities and following medical advices.

It is equally important, for the group dynamics, especially for this examined one, to observe the characteristics of the excluded one.

X. is the outcast of the group, considered unsociable and "different" by her companions; X. prefers to have a relationship with the medical staff and institute administrative, rather than with the companions who share with her the rehabilitation program. So X. is marginalized by the community because her companions "feel" that she doesn't have a sense of belonging, just like they "feel" that she does not accept her condition; X., by doing so, sends negative messages to the group. On one hand she sends messages like "I am privileged", "I don't need you", "I don't relate with paraplegics", on the other hand she sends the final message that to be paraplegic is unbearable and unacceptable.

Clearly X. is not aware of doing this; in fact this happens at an unconscious level.

Starting from the results obtained from the considerations of the protocol, the Psychology Service Institute San Raffaele Sulmona can design small interventions on the ward community, which in addition to promoting and enhancing the well-being and self-esteem, they will help foster the well-being of the group and increase the quality of life, and above all, of rehabilitation.

Previously, we had listed the goals of this sociometric survey.

To achieve them we should try to integrate all members of the group in order to benefit from everyone's skill. For example X. has considerable organizational skills and autonomy. Through the integration of X. in the group everyone could benefit from her knowledge and her precious advices.

To help the integration of the isolated and the refused participants, and consecutively increase the productivity level of the department, it's important as much as possible to put in contact the leader, the isolated and the refused, for example by making room changes, entrusting them with shared tasks and decision making regarding daily activities, organizing group discussions and making them lead the group.

These "small" tasks will help the excluded member with the integration in the group and the leader's collaboration with X., they will increase Y.'s skills and foster the productivity of the group.

Group work and discussions will foster its cohesion and also, when led by psychologists, the groups will be a moment of confrontation, growth, sharing of the pain and problems, as well as a place to raise patients' self-esteem, become aware of the new condition, in other words, to know oneself.

Furthermore, from the sociometric observation and investigation it has been found out that a not sufficiently good leader and disharmony, among the patients of the department, increase the sense of helplessness of these people to improve their condition and the dissatisfaction of the undertaken rehabilitation program. In other words if the leader is not very productive and complains about the environment, the rest of the group assimilates and imitates that kind of attitude.

To reduce discomfort and improve the perception of quality of life and life itself, including the rehabilitation project, the group must be cohesive, share the goals, discuss and participate, in order to improve adherence and compliance to the treatment protocol.

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