

EVALUATION OF SOCIAL SUPPORT AMONG PERSISTENT CHRONIC DISEASE PATIENTS FOLLOWED UP AT PROVINCIAL HOSPITAL OF KENITRA, MOROCCO

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Abstract

Current research is expanding our understanding of the influences of social support on health. Many epidemiological studies have focused on further linking measures of social support to physical health outcomes. A few studies are now moving into new areas, such as focusing on health links with the receipt and provision of support. Researchers are also interested in highlighting relevant pathways, including potential biological (i.e., inflammation) and behavioral (i.e., health behaviors) mechanisms. Interventions to apply basic research on the positive effects of social support are also widespread. Although the long-term effects of such interventions on physical health remain to be determined, these interventions hold promise for influencing quality of life in many populations with chronic disease. A total of 170 patients with chronic disease at El-Idrissi Hospital, with a mean age of 51.51 years were included. Participants responded to the Questionnaire of Sociodemographic Variables (Q-SV), SF-36 Health-Related Quality of Life Scale–version 1.1, and MOS-SSS. This study involved 38.1% of patients with heart disease, 36.9% with diabetes and 25% with respiratory insufficiency. The mean total score of availability is 11.37 ± 0.56 , with a minimum of 6 people on whom the subjects can rely and a maximum of 27 people on whom the patients can trust. The median is 11 people. The calculation of percentiles allows to define the limits of which we have no idea. Furthermore, 25% of the subjects declared to have been supported by less than 7 people; 50% between 7 and 12 people and 25% declared to have been supported by more than 12 people.

Keywords: Social Support, Emotional Support, Physical Health, Well-Being, Kenitra, Morocco.

1. INTRODUCTION

Over the past 30 years, researchers have shown great interest in the phenomena of social support, particularly in the context of health. Previous work has found that those with a high quality or quantity of social networks have a reduced risk of mortality compared with those with a low quantity or quality of social relationships, even after statistically controlling for baseline health status [1, 2]. In fact, social isolation itself has been identified as a major independent risk factor for all-cause mortality [3, 4].

It is important to note that social support in these studies is operationalized in several different ways. Most generally, support can be conceptualized in terms of structural components (e.g., social integration: being part of different networks and participating socially) and functional components (e.g., different types of transactions between individuals, such as emotional support or favors) [5, 6]. How functional components are measured often varies across studies; transactions can be summarized by actual support received (often verified by asking support providers), perceived support received or available, or the gap between perceived and received support [7-11].

Current research is expanding our understanding of the influences of social support on health. Many epidemiological studies have focused on further linking measures of social support to physical health outcomes [12, 13]. A few studies are now moving into new areas, such as focusing on health links with the receipt and provision of support. Researchers are also interested in highlighting relevant pathways, including potential

biological (i.e., inflammation) and behavioral (i.e., health behaviors) mechanisms. Interventions to apply basic research on the positive effects of social support are also widespread [14, 15]. Although the long-term effects of such interventions on physical health remain to be determined, these interventions hold promise for influencing quality of life in many populations with chronic disease [16, 17].

The objective of the current study is to evaluate the social support among persistent chronic disease patients followed up at provincial hospital of kenitra, Morocco. Current research has focused on expanding several areas of knowledge in this area. These include

- (1) The influences of social support on morbidity, mortality, and quality of life in chronic disease populations,
- (2) Understanding the mechanisms responsible for such associations, and
- (3) How we might apply these findings to design relevant interventions.

2. MATERIALS AND METHODS

2.1 Study Design

This is a descriptive cross-sectional study conducted during the months of June and July 2021, in El-Idrissi hospital in Kenitra, Morocco. This study was conducted on 85 patients. The inclusion criteria were all Moroccan patients residing in El-Idrissi hospital in all departments of the hospital.

2.2 Instruments

We wished to adapt into French Sarason's shortened social support questionnaire, the SSQ6 [18]. The American version of this tool allows for the economical evaluation (12 items in all) of two very stable aspects of perceived social support: availability and satisfaction. Availability corresponds to the individual's estimate of the number of people who can provide help in case of need. Satisfaction is the individual's perceived adequacy between the support received and his/her expectations and needs. These dimensions are conceptually distinct. Thus, one can be satisfied despite a small number of friends and relations and dissatisfied even if this number is large. At the empirical level, these two dimensions are positively and moderately interrelated. We also chose this tool because of its excellent psychometric qualities (stable factorial structure, internal consistency of the scales, test-retest reliability, and non-contamination by social desirability) and its superiority over other measures of support, qualities attested to by the numerous research studies conducted by Sarason and his colleagues on American subjects [18].

An additional reason for choosing the SSQ6 is its criterion validity. Its availability and satisfaction scales have been shown to be associated with various adaptive aspects of personality: negative relationships with negative affectivity, anxiety, depression, neuroticism, and hostility; positive relationships with positive affectivity, extraversion, and self-rated social competence [18].

Our first objective was to establish the construct validity of the French version of the SSQ6, a short version of the SSQ validated by Sarason et al. To do this, we tested the stability of its two-factor structure (satisfaction and availability) and verified the psychometric qualities of each scale (test-retest reliability, internal consistency, non-contamination by response patterns). Our second objective was to study the criterion

validity of this tool. We therefore calculated the correlations between the availability and satisfaction scores, on the one hand, and the scores obtained on personality scales, coping scales and physical and psychological health criteria, on the other hand, on various sub-groups of French subjects.

2.3 Study Protocol

The purpose of this study is to test the generality of the two-factor structure of the Sarason Short Form Social Support Scale (SSQ6), which measures two dimensions of social support (satisfaction and availability). We administered the French version of the SSQ6 to 85 patients facing more or less stressful situations (student life, unemployment, severe illness or disability).

Confirmatory analyses were carried out on the whole population and on the subgroups (students/patients/unemployed; men/women) to test the equivalence of the factor structures obtained in the different groups. They confirm the stability of the factor structure of the SSQ6 (between groups and between cultures). In addition, the two dimensions of the SSQ6 (satisfaction and availability of support) are associated with functional transactional processes (active coping, healthy lifestyles) and various emotional and somatic health criteria.

Sarason et al. [18] constructed a widely used perceived social support questionnaire, the Social Support Questionnaire (SSQ), of which there is a 27-item version and a short 6-item version, the SSQ6. We subjected the SSQ6 items to a double translation before arriving at a French version of this tool (presented in the appendix). For each item, the respondent lists the people he/she can count on in the situation described (maximum 9 people) and expresses his/her degree of satisfaction (from 1 to 6) with this support. Two total scores are then calculated, one for availability (N=number of people mentioned) and the other for satisfaction (S), which correspond respectively to the sum of the "number" (N score) and "satisfaction" (S score) scores obtained for each of the six items. Thus, the N score varies from 0 to 54 and the S score from 6 to 36. Other tools were administered to these samples to study the criterion validity of the two dimensions of the SSQ6.

It consists of 5 statements measuring a general satisfaction that the person may have with his/her life. There is only one dimension and each of the 5 statements is added together and rated on a scale of 1 (strongly disagree) to 7 points (strongly agree).

For each of the following statements, circle the number that best represents your level of agreement or disagreement.

- 1 = Strongly disagree.
- 2 = Disagree.
- 3 = Slightly disagree.
- 4 = Neither disagree nor agree.
- 5 = Slightly agree.
- 6 = Agree.
- 7 = Strongly agree.

2.4 Statistical Analysis

The survey is a descriptive cross-sectional epidemiological study. The data collected was entered in Excel 2013 then erased on the support of the SPSS software (trial version) for descriptive and analytical order analyses. In a first part, we presented the demographic and socio-professional characteristics of teachers in the form of tables and graphs. Inter- and intra-item correlations were defined between the weighted factors and each dimension. To search for possible associations, we performed statistical analyzes (Pearson's correlation, Chi2 tests, Fisher's test (ANOVA); simple linear regression and multiple logistic regression, etc.). A chosen risk of first kind of 5% was for the realization of the statistical tests and the risks first species of 5% was chosen for carrying out the statistical and risk tests.

3. RESULTS

The study that we conducted was carried out on 84 patients encountered during their medical visits to the El-Idrissi Hospital in Kenitra. These patients suffer from cardiac and respiratory diseases, diabetes and urolithiasis. The average age of these patients was 39.5 ± 0.89 years, with a minimum age of 20 years and a maximum age of 62 years. The distribution was quite symmetrical with a skewness coefficient of 0.308 and a kurtosis of 0.022.

The ages are then grouped into age categories; the results are presented in the figure below. 80.9% of the patients surveyed are between 30 and 50 years old.

This study involved 38.1% of patients with heart disease, 36.9% with diabetes and 25% with respiratory insufficiency.

To calculate the Availability score, we have to note the number of people on whom the subjects declare they can count (from 0 to 9) for items 1, 2, 3, 4, 5 and 6, then the total availability score, N (sum of these numbers) which varies from 0 to 54.

The mean total score of availability is 11.37 ± 0.56 , with a minimum of 6 people on whom the subjects can rely and a maximum of 27 people on whom the patients can trust. the median is 11 people. The calculation of percentiles allows to define the limits of which we have no idea. Furthermore, 25% of the subjects declared to have been supported by less than 7 people; 50% between 7 and 12 people and 25% declared to have been supported by more than 12 people. The results of this classification are illustrated in the figure 1. In fact, the prevalence is 28%; the cases to be monitored represent 49%; therefore, there is a high chance that these people will turn into pathological cases and only 23% where the support is reasonable.

In this section, we used a principal component analysis. The results of this analysis are shown in figure 1. The two axes 1 and 2 alone absorb more than 75% of the total variability. The projection of the variables allows us to identify distinct groups:

The first group of variables correlated with availability; all questions were found to be highly correlated with availability; this explains well the sometimes satisfactory and sometimes not satisfactory support.

The second group also shows a strong association between the questions and the satisfaction dimension (figure 2).

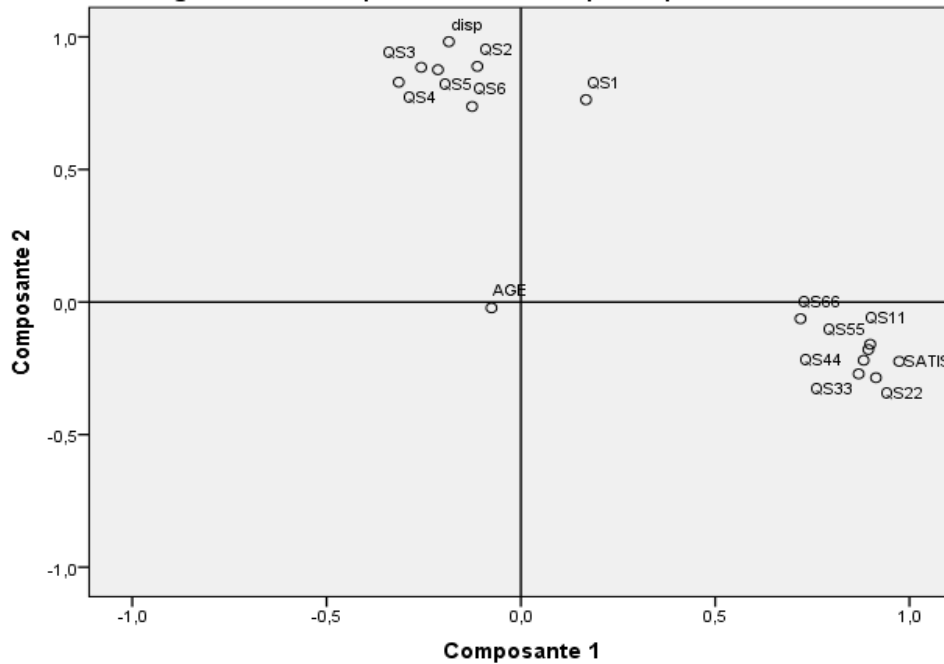


Figure 1: Multiple Correspondence Analysis of Variable Components

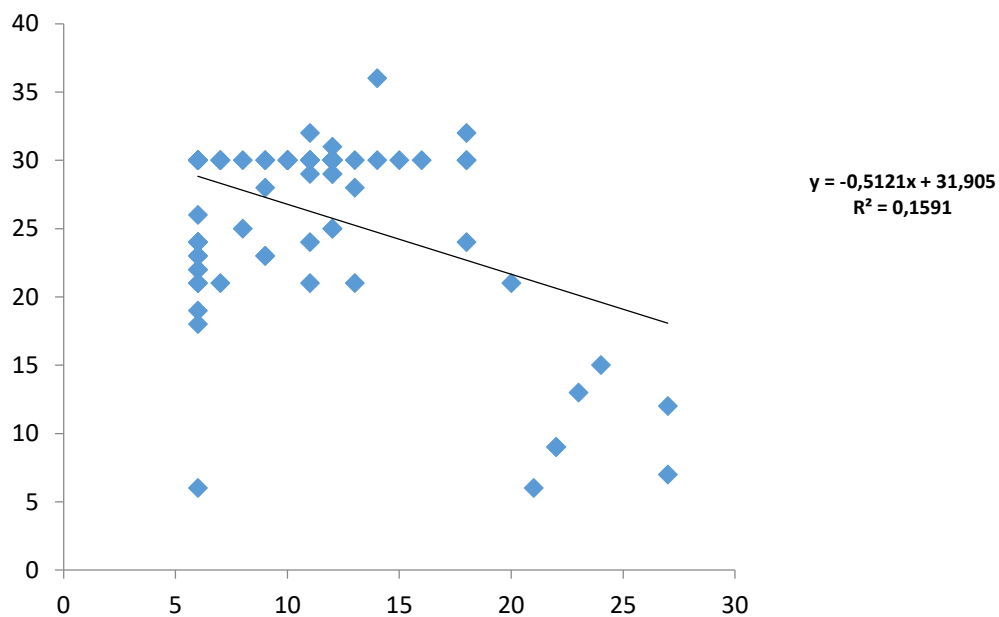


Table 1: Simple Regression of Availability and Satisfaction Factors

4. DISCUSSION

As we learn more about the effectiveness of social support in influencing health outcomes, it becomes attractive to use this information to directly assist clinical populations. This may explain why the largest proportion of recent research on social support and health has involved interventions, many of which have focused on chronic disease populations such as cancer patients.

There are different types of interventions implemented, many of which include elements of education and understanding, for example in the context of a support group. Support groups can be particularly useful because of the gaps they can fill in patients' support needs and the experiential similarity within the group. For example, a qualitative study of cancer support groups revealed the unique role of these groups as sources of available community, information, and acceptance; in contrast to the diminishing support of overburdened family and friends. In addition, these are situations in which patients can offer support to others, and patients report that membership in these groups provided an element of support that augmented support from other networks [16,19].

Several animal models are used in the study of the impact of stress in the cognitive function [20-25]. In addition to support groups, some interventions focus on teaching general psychosocial skills and capitalizing on support within existing networks (e.g., cognitive behavioral therapy) [26,27]. In one study, caregivers of CHD patients were enrolled in a randomized intervention trial designed, in part, to teach support-seeking skills. Compared with a usual care control group, those in the treatment group were better able to foster their emotional connections and were more satisfied with the support [28]. This type of intervention has also been shown to work in child patient populations. For example, children with cystic fibrosis participated in a randomized intervention trial that educated children about their disease and taught them relevant social skills [29-32]. Those in the treatment group improved their quality of life and peer relationships, and decreased their loneliness and perceived impact of the disease [33-35]. These results are particularly important because of the potential isolation that children face in some chronic disease settings. In another intervention, patients with type 2 diabetes improved their use of social resources and social integration (although perceived support did not change) compared with usual care [36-39]. In addition, such changes had effects on physical activity, percentage of calories from fat, and blood glucose levels [40-42]. It should be noted, however, that the use of such broad or complex interventions, although successful in modifying risk factors does not allow us to conclude which specific component may have driven the beneficial results [43-45].

5. CONCLUSION

Studies on social support and health are robust and continues to be an active area of research. However, the next generation of studies must be able to explain the contexts and mechanisms for why such associations exist. Such research is in its infancy, but is currently encouraged by growing interdisciplinary perspectives on social support and health. We believe that such approaches will be crucial to better tailor primary or secondary support interventions that have beneficial influences on physical health outcomes.

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