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# Is it possible to achieve functional recovery in schizophrenia? A qualitative and quantitative analysis of psychiatrist's opinion

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**Introduction.** Psychiatrist's opinion on functional recovery (FR) of patients with schizophrenia may modulate the therapeutic expectations and how to manage the disease.

**Objective.** This study aims to know the opinion of psychiatrists on FR, and to analyze the relationship between functioning and symptoms.

**Methods.** A qualitative and quantitative, descriptive and exploratory study. Two data collection techniques were used: a) a written survey consisting of 12 questions, directly, anonymously and confidentially answered by 132 psychiatrists; b) 5 focus group discussions involving 42 psychiatrists.

**Results.** 69.8% of psychiatrists considered realistic to get FR in schizophrenia and another 30.1% chose an intermediate response. The clinical priority for the 94% is to optimize the functional outcome of their patients, but only 14.4% commonly use rating scales. 91.7 % believed that there are differences between typical and atypical antipsychotics in terms of FR, and 83.3% believed essential to implement psychosocial interventions to achieve this goal. According to psychiatrists, FR is a complex concept and a primary therapeutic goal. Negative and cognitive symptoms are the strongest predictors of poor functioning. The low functioning of a patient, even in symptomatic stability, usually requires a re-evaluation of treatment.

**Conclusion.** For psychiatrists, FR is a useful concept and a clinical priority, although there are doubts about how to achieve it.

**Keywords:** Functional recovery, Functioning, Schizophrenia, Psychiatrists, Opinion survey

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## ¿Es posible la recuperación funcional en la esquizofrenia?: un análisis cuali-cuantitativo de la opinión de los psiquiatras

**Introducción.** La opinión de los psiquiatras acerca de la recuperación funcional (RF) de los pacientes con esquizofrenia puede modular las expectativas terapéuticas y la forma de abordar la enfermedad.

**Objetivo.** El presente estudio pretende conocer la opinión de los psiquiatras sobre la RF, y la relación que consideran que existe entre funcionalidad y sintomatología.

**Metodología.** Análisis cuali-cuantitativo, descriptivo-exploratorio, en el que se utilizaron dos técnicas de recogida de información: a) una encuesta escrita, compuesta de 12 preguntas, respondida de forma directa, anónima y confidencial por 132 psiquiatras; b) 5 grupos focales de discusión en el que participaron 42 psiquiatras.

**Resultados.** El 69,8% de psiquiatras considera realista conseguir la RF en la esquizofrenia y otro 30,2 % opta por una respuesta intermedia. La prioridad clínica para el 94% es optimizar la funcionalidad de sus pacientes, pero sólo un 14,4% utiliza habitualmente escalas de evaluación. El 91,7% considera que hay diferencias entre los antipsicóticos atípicos en cuanto a la RF, y un 83,3% cree imprescindible implementar intervenciones psicosociales para conseguir este objetivo. Según los psiquiatras consultados, la RF es un concepto complejo, dependiente de factores ambientales y

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una ambiciosa meta terapéutica. Los síntomas negativos y cognitivos son los más predictivos de pobre funcionalidad. La baja funcionalidad de un paciente, aun en estabilidad sintomatológica, requiere una re-evaluación de tratamiento.

**Conclusión.** Para los psiquiatras la RF es un concepto útil y una prioridad clínica, aunque existen dudas sobre cómo alcanzarla.

**Palabras Clave:** Recuperación funcional, Funcionalidad, Esquizofrenia, Psiquiatras, Opinión encuesta

## INTRODUCTION

Schizophrenia has long been regarded as a chronic and progressive disease with an almost inevitably deteriorating course. The DSM-III, for example, outlined this negative prognosis, even putting into question the diagnosis of schizophrenia if a good social and occupational functioning was present<sup>1</sup>. The debate over whether schizophrenia is an inexorably debilitating entity -a *dementia praecox*- or not has clear therapeutic implications. Typically, the therapeutic objectives have been frequently modest and limited to control of behavior and symptoms, although in recent decades the goal of treatment has shifted to promotion of functioning.

Functioning is defined as the capacity to adaptation to personal, family, social and labor needs of a productive adult without disease. In the case of schizophrenia, functioning is mainly affected by positive, negative, cognitive and affective symptoms of the disease, side effects of certain drugs, high rate of substance abuse and lack of family and community support<sup>2,3</sup>. Studies show a highly variable rate of functional recovery (FR) ranging from 13 to 40%<sup>4-6</sup>. Menezes et al. systematically reviewed 37 studies about the evolution after a first psychotic episode and found that 42% had a good outcome. However, in a 36-month follow up study, Novick et al.<sup>8</sup> added an adequate quality of life to the concept of recovery, and only 4% of patients reached it. This variability of data is a reflection of the lack of a good conceptual definition of the construct "schizophrenia" (the type of patient included in the samples) as well as the FR itself<sup>9</sup>.

In an attempt to operationalize the concept of "good clinical outcome", Andreasen et al. proposed some criteria for symptomatic remission, based on the maintenance, for at least six months, of low level of psychotic, disorganized and negative symptoms<sup>10</sup>. Regarding these criteria, recovery is a more demanding and more long-term process, stating

that this clinical remission is *necessary but not enough* to reach recovery. However, sometimes the improvement of symptoms of schizophrenia is not necessarily reflected in a parallel functioning achievement<sup>11</sup>. According to the generally accepted view, functional recovery involves adequate psychosocial functioning in major domains of daily life activity: personal care, housing, work and relationships with others. Recovery seems to imply the concept of remission of symptoms plus a return to premorbid functional level<sup>12</sup>. Anthony<sup>13</sup> recalls that recovery includes not only the return to normality but also the recovery from the effects of having been diagnosed with mental illness. These effects are related to discrimination, devaluation, unemployment and the potential failure of a vital project. Thus, FR can be understood as an outcome measure or as a process; as a result of the absence of disease -significant improvement of symptoms and good work and social functioning- or as a subjective attitude that -irrespective of the state of sickness- allows to feel hopeful, to be capable to showcase their skills and to make their own decisions<sup>9</sup>.

FR is a main goal of the current treatment of schizophrenia, since we know that a significant percentage of patients may get it. However, as a concept it should be more clearly defined and better articulated to include useful aspects for research and perspective of service users. The opinions of psychiatrists about FR may modulate therapeutic expectations and probably the way to tackle the disease. However, few studies have described the attitudes and opinions of the professionals in this field. Most studies are based on Internet surveys and are focused on attitudes to the disease (stigma) rather than on the chances of FR<sup>14-16</sup>.

This study aims to analyze the psychiatrist's opinion about the importance of FR in addressing schizophrenia, the relationship between FR and the symptomatic domains, and the realistic chances to achieve it in the daily practice.

## METHODS

A qualitative and quantitative, descriptive and exploratory study was carried. Two data collection techniques were used: a) a written survey composed by 13 questions -directly, anonymously and confidentially answered by 132 psychiatrists; b) 5 focus group discussions involving 42 psychiatrists. Both methodologies applied are described below:

- a) The survey was developed by the research team, following an exhaustive bibliographic review<sup>19</sup>. From an initial proposal base, authors selected 12 items which were considered the most relevant from the perspective of clinical practice and eventually formed the survey. For each item, the participant was asked to ex-

press their level of agreement according to its usual practice, guaranteeing full anonymity and confidentiality of information. The sampling unit of the survey were psychiatrists nationwide. The main characteristic that characterized this sample was the professional experience treating patients with schizophrenia, from diverse geographical locations (23 out of 50 Spanish provinces were represented).

- b) The qualitative approach involved 42 Spanish psychiatrists, distributed in 5 focus groups of 8 or 9 members each. The groups were conducted simultaneously and were coordinated by a researcher with long experience in focus groups (JPF). In each group a moderator was present, and his role was to propose questions or thematic categories, encourage debate and guide the group work, avoiding having a central role in the interaction. Its purpose was to provide an environment that would usefully explore opinions and attitudes from the interaction among participants<sup>17,18</sup>. All participants were active psychiatrists, currently treating patients with schizophrenia, practicing in different locations of Spain, the vast majority in the public services. The duration of the groups was 80 minutes, plus 40 minutes of sharing. The content of the focus groups was recorded in a digital audio tape recorder (prior approval of all participants) and later transcribed by different professionals who interpreted its contents. The process of interpretation (identification of the significance of the messages from the thematic categories provided) was decided in advance and was independently conducted by two researchers. Then the results were put together and were supplemented with the analysis of the team. For data analysis, the following steps were followed: a) identification of issues and development of concepts; b) encoding of the data, including comparison of the different fragments related to each subject, and identification of significant and recurring discourse; c) contextualization, or analysis of how data were collected and how it may influence results<sup>20</sup>.

## DATA ANALYSIS

After having adjusted and coded, a descriptive analysis of the survey was done. For all variables, means, standard deviations and percentages were obtained, with a maximum permissible error of  $\pm 3.5$  and a confidence level of 95.5%. Tabulation results were expressed in absolute and relative distributions frequencies (crosstabs).

The qualitative analysis of the content of the focus groups was based on text segmentation and building codes, and grouping concepts into categories.

## RESULTS

### Quantitative analysis

A total of 132 surveys were collected. Data showed that the concept of FR is a useful concept in clinical practice for 90.9% of those surveyed psychiatrists (21.1% somewhat agreed, 53.8% quite agreed and 15.9% absolutely agreed) (Figure 1 and 2 contain the responses to each item). Only 1.5% of the sample differed in its usefulness. However, the use of assessment scales on FR in daily practice is scarce: 33.3% does not use them (18.9% absolutely and 14.4% quite disagreed with its regular use), and 14.4% does (5.3% absolutely and 9.1% quite agreed). In between it is located a 52.3% that only partially adheres to the use of scales in the assessment of functioning.

For 94% of those surveyed psychiatrists, the clinical priority was to optimize the functioning of their patients (23.5% slightly; 43.2% quite; 27.3% totally agreed). Again, only 1.5% of the sample slightly disagreed with this statement. Regarding the relationship between symptoms and functioning, the distribution of responses was heterogeneous. 65.9% believed that remission of symptoms is a key to achieve global functioning (absolutely, quite or somewhat agreed), but 34.1% did not observe so clearly this relationship (they slightly or somewhat disagreed, or expressed a neutral option).

Roughly half of psychiatrists (50.8%) expressed that many factors related to functioning are beyond its control, and another 29.5% agreed somewhat with this statement (80.3% in total). Regarding a central question of this study (Is it realistic or not to achieve FR in schizophrenia?), 69.8% considered it realistic (15.2% absolutely, 32.6% quite; 22% somewhat agreed) and another 24.3% expressed a neutral (12.9%) or opposite (11.4%) response. Only 6.1% of respondents considered that goal unrealistic. The question which elicited the greatest agreement was the importance of implementing psychosocial interventions to achieve patient's functioning: 83.3% somewhat or absolutely agreed. This percentage reached 97% including those psychiatrists who showed little agreement with the statement. Interestingly enough, no psychiatrist expressed any discrepancy, and only 3% showed neither agree nor disagree. In relation to pharmacological treatment and functioning, 91.7% of psychiatrists little, quite or completely agreed that there are differences between typical and atypical antipsychotics. Greater variability of response appeared in relation to differences between atypical: 50.7% believed quite or absolutely that there are differences, 28% somewhat agreed, and 21.3% chose a different option (10.6 % neutral 5.3% somewhat disagreed). 78.7% of the sample believed that there are

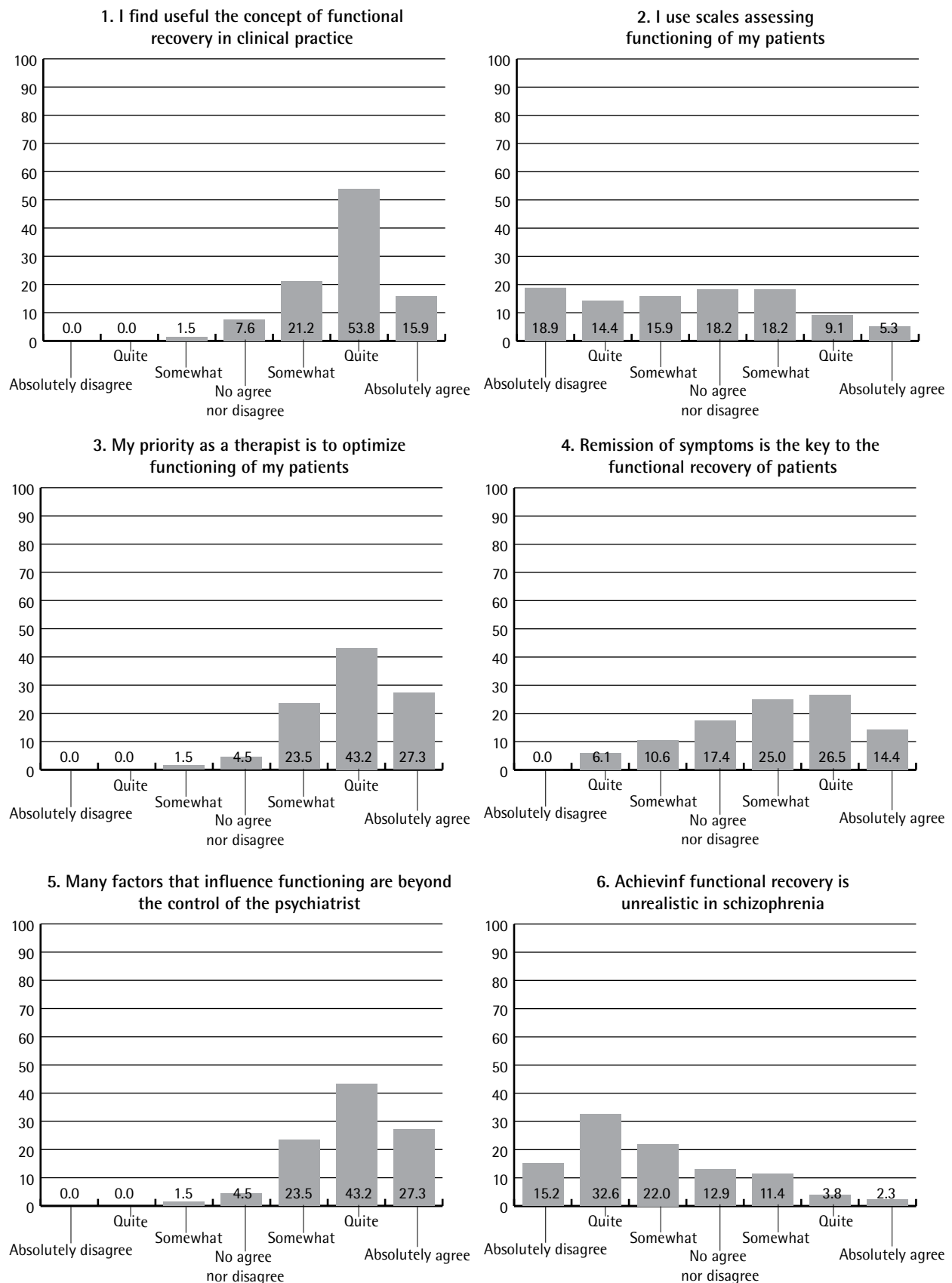


Figure 1

Psychiatrist's responses in the survey (I)

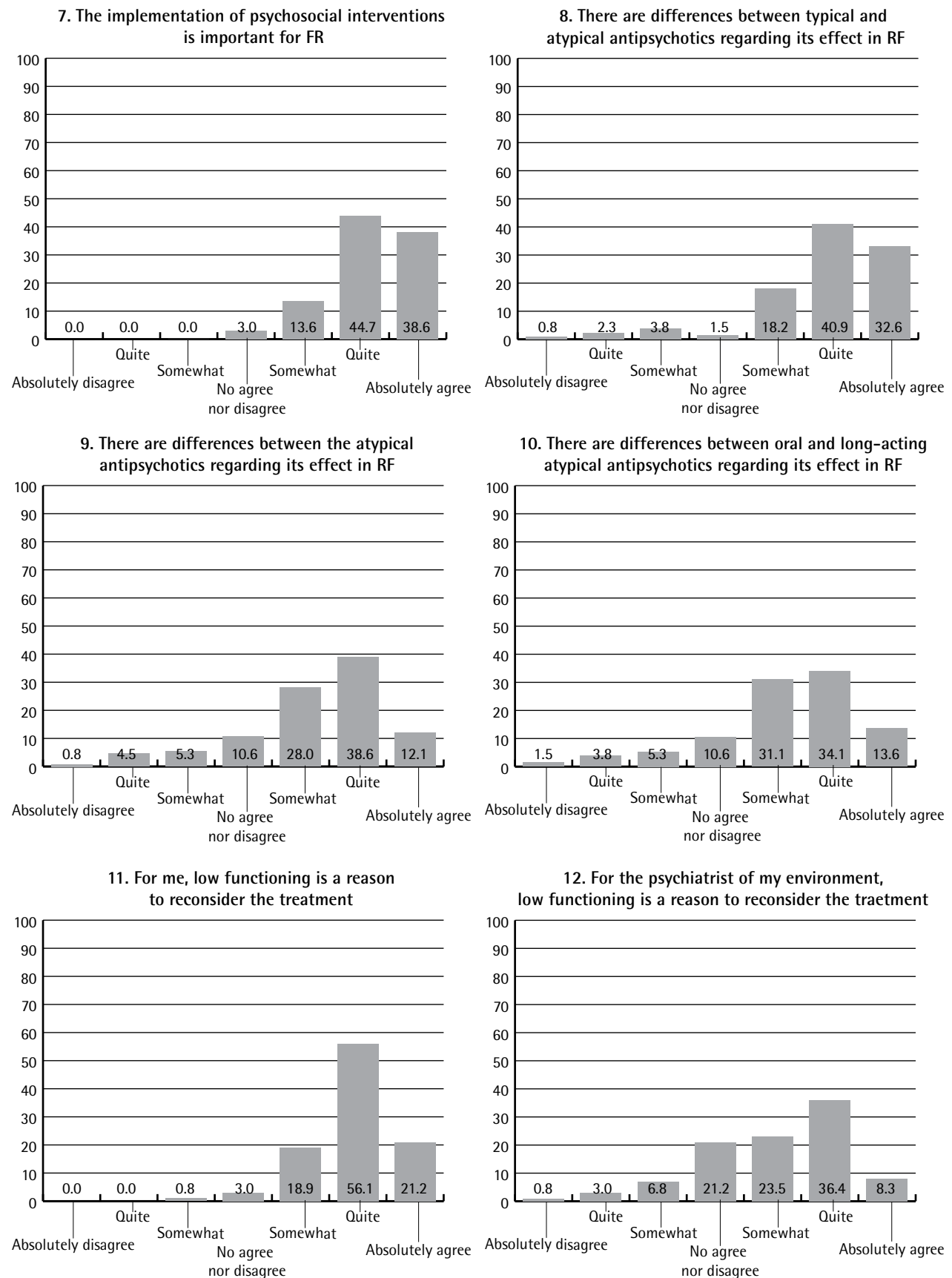


Figure 2

Psychiatrist's responses in the survey (II)

some differences in relation to the FR between oral and long-acting injectable atypical antipsychotics, while 21.2% adopted a neutral position or disagreed. The last two questions showed different response distribution. 77.3% expressed that a low patient's functioning is a clear reason to reconsider treatment (and it increased to 96.2% if the answer "somewhat agree" was included). However, when asked about the same statement "for psychiatrists around me", the percentage dropped to 44.7% (plus 23.5% which slightly agreed), and 28% expressed a neutral or opposite response.

## Qualitative analysis

All content that was recorded during the different focus groups was analyzed, finding marked coincidences between them. Next, messages with a greatest significance are presented, classified by pre-established analytical categories:

### What is FR and how can be assessed?

- For participants, unlike other constructs as symptomatic remission, FR construct is complex and multidimensional, and there is great difficulty to delimit and define it:

*"It is very complex and has many nuances; of course, you know you recover your knee, because the knee has a clear function, right? But there are too many facets in people's life" (G1)*

*"It is difficult to define, yes. I think we understand the concept in an abstract way, but it's difficult to put words and define it" (G2)*

- In functioning assessment, to take into account environmental factors surrounding the patient, job opportunities and family resources is required. Sometimes these factors are beyond the clinical setting and depend on the socio-cultural conditions of the subject. Potential FR is also limited by the availability of community resources or psychosocial rehabilitation centers.

*"The context is crucial. The work is different in a rural or an urban area. Or even the level of previous functioning, because we sometimes project our interests rather than the interest of the patient" (G3)*

*"It's a very difficult concept because many variables are involved, actually. Family pressure, friends ... (...), sometimes the goal is based on that" (G5)*

- Patient's current functioning should be evaluated in relation to premorbid level. Given the difficulty of assessing the degree of functioning, psychiatrists usually compare the current status with the previous level, sometimes indirectly reported from informants:

*"To achieve a good functional capacity after the psychotic episode., that would be the best, right? Getting back to the previous state (...)" (G2)*

- FR is the therapeutic goal, although in reality it is achieved in few cases. Psychiatrists refer the difficulty of recovering the premorbid functional level and how often the emergence of schizophrenia is a vital breakdown.

*[FR] "is difficult to achieve, but I think that's the goal, right? Immediately after the episode there are more possibilities of recovery, but then as time goes by ..." (G2)*

*"If the level of demand is very high and we intend to reach the previous level of functioning, the patient's sense of frustration might be counterproductive" (G5)*

- Scarce use of rating scales of functionality. Psychiatrists refer a limited use of assessment scales of functioning, due to time constraints and deficiencies observed in them (for ex. lack of contextualization). Its use is practically limited to participation in clinical trials:

*"In any study, any trial, but the truth is that in clinical practice we do not use them..." (G2)*

*"Many times we do not have the time to administer the scale. (...) We use intuitive scales, the interview we do, the context in which you want to develop the functioning, whether family, friends, at work..." (G3)*

### What is the relationship between symptoms and functionality?

- To treat positive symptoms is necessary but not enough to reach FR. Some disruptive positive symptoms preclude a good functioning, but, once treated, FR depends more on negative and cognitive symptoms than on positive ones. The concept of functioning involves overcoming the concept of treatment exclusively based on reducing delusions and hallucinations:

*"[In] a patient who is suffering an aggressive psychotic episode, the loss of functioning is much greater" (G1)*

*"We feel we help the patient when there is an improvement of symptoms, and we should pay more attention to functional issues. Sometimes the family comes and says "he/she is very sick". Sure, it's really sick because functional recovery has not caught up with symptoms' improvement" (G3)*

- Negative and cognitive symptoms of schizophrenia are nuclear. They are good predictors of low functioning and they are difficult to treat:

*"Everything that has to do with cognitive impairment is related to functional recovery" (G5)*

*"Difficulties usually do not come because the patient hears voices or is paranoid, but because the patient does not get up, does not work..., because after three days he feels unmotivated and he does not go even to receive the salary" (G4)*

#### Treatment and functionality

- To achieve FR, the implementation of a holistic and comprehensive treatment is required. Drug treatment, isolated, is not enough and should be enhanced with individualized psychosocial interventions. Participants specially underline the usefulness of family and occupational interventions. They express that, in the psychosocial field, any form of therapy is not valid, but one that has a proven effectiveness:

*"The first step would be symptom control (...) It would be a prerequisite for other interventions" (G1)*

*"I think we have to be sharp (...) [For functional recovery] I think the treatment is not only a pharmacological one" (G2)*

- There are some differences between typical and atypical antipsychotics in relation to FR. Despite having similar efficacy, typical drugs have a profile of side effects that may negatively impact in FR. Participants agree on the stigmatizing effect of some specific adverse effects, such as drooling, parkinsonism, sedation or obesity:

*"The image of psychiatry units has dramatically changed. Some decades ago, it seemed a zombie movie, and this clearly contributed to stigma" (G4)*

- Is the low patient's functioning a reason to re-evaluate the drug regime, even if patient is symptomatically stable? Yes, but not in the practice. On this question the participants recurrently accept that functioning should be a reason to re-evaluate the treatment, but the fear of destabilization is a barrier to do it:

*"If there is low functioning, we should rethink the treatment (...). But if the patient is psychopathologically stable, tolerates well the drugs, has a good adherence..., come on, you do not touch absolutely anything (...) we are afraid of a new relapse ..." (G1)*

*"It depends on the psychiatrist's expectation. The greater are the expectations about our patient's recovery, the more we value functioning" (G3)*

#### What are the real patient's needs?

- Patient's needs are universal and common to any other people. Regardless of insight about the disease, patients show need of help, support and listening:

*"Everybody wants to be ok: to have a boy or girlfriend, to live at home, to have an employment (...) Patient does not say: "Please remove me this delusion" (G4)*

*"They need support, help, the need of anybody, love ..." (G5)*

*"Thousands of things. Not to be alone ... (...) to be integrated, have a job, a girlfriend ..." (G1)*

- Sometimes a discrepancy appears between therapeutic goals and real needs that patients express. This gives rise to a debate between the paternalistic medical relationship and the principles of beneficence and respect for autonomy:

*"What do they ask themselves? What do we want for them ...?" (G2)*

*"To satisfy the clinical needs requires to learn what they really need" (G1)*

## DISCUSSION

The main value of this study is that its results integrate knowledge and clinical experience of a broad group of experts from different settings, through a mixed qualitative and quantitative analysis. This complementary approach -in contrast to previous studies exclusively based in surveys- may apprehend psychiatrists' opinions and attitudes with potential effects in the clinical management of schizophrenia. According to survey data, for the vast majority of psychiatrists, FR concept is useful and represent its clinical priority. These results are in contrast with a survey conducted in Spain few years ago<sup>2</sup>, which might indicate

a change in trend. In this study participants indicated that symptom control was the priority, while preventing relapses and functioning were secondary objectives. This contrasts with 94% of surveyed psychiatrists in our study, who considered FR as the main clinical priority. This trend in the professionals' opinion -to change the focus of the daily practice from symptoms' control to functioning promotion- runs parallel to the addition of functioning measures in the development of drug trials<sup>21,22</sup>.

The use of rating scales (17% in the previous study and 14% in ours) remains the exception rather than the norm, and contrasts with the recent Spanish adaptation and validation of simple and relatively easy to administer instruments<sup>23,24</sup>. This trend to the non-standardized assessment of FR poses some problems, such as poor reliability or agreement between raters, and low sensitivity to change, which may lead to a nihilistic attitude to our therapeutic options and patient's prognosis<sup>25</sup>. This rejection of the systematic assessment of FR can have several causes, such as time and complexity of administration<sup>26,27</sup> or poor ecological validity of some scales. In any case, the focus groups highlighted the importance of assessing the current patient's functioning from the premorbid level, beyond preset ideas or universal standards (to make an individualized assessment of functioning).

Nevertheless, our study is consistent with the survey conducted in 42 countries about the importance of evaluation and management of functioning in schizophrenia<sup>28</sup>. This survey shows that the vast majority of psychiatrists (92%) consider the FR a therapeutic target, while recognizing that more than 2/3 of their patients have poor functionality. This paradox between clinical expectation and reality is also present in our study, suggesting, first, that these findings are globally shared and secondly that aiming to a greater FR -though not always possible- is the best attitude in order to optimize treatment. Conversely, a nihilistic attitude, with little or no expectations of change, is a guarantee for a self-fulfilling prophecy in which poor treatment confirms that patients with schizophrenia cannot improve. A second coincidence with the study by Gorwood et al. is the importance given by psychiatrists to psychosocial interventions in the FR of schizophrenia. Almost unanimously, they consider that the implementation of several interventions can enhance functioning: psychoeducation, family therapy, various forms of social skills training, cognitive rehabilitation, case management and / or occupational therapy.

Regarding drug treatment, a moderate optimism in the historical evolution of psychopharmacology of schizophrenia is observed. For most respondents there are differences between typical and atypical antipsychotics with respect to the FR, and 78.7% finds differences among atypicals, and between atypicals and long-acting injectable antipsychotics.

Psychiatrists from the focus groups also express functional differences between specific drugs, mainly due to different tolerability profile. Certain side effects (sedation, drooling, parkinsonism or obesity) not only add difficulty to carry out daily activities but also generate greater social stigma. 77.3% believe the low functioning -even being symptomatically stable- is a reason to re-evaluate treatment; however, when asked about other colleague's opinion, the percentage drops to 44.7%. This discrepancy between self-perception and opinion of the environment is clarified in the focus groups, where repetitively it is considered that the low level of functioning *should be* cause for re-evaluation of treatment, but it is not performed actually. It is noted that there is a current tendency, which advocates prioritizing the patient's functioning, but it coexists with the psychiatrist's fear of patient's symptomatic destabilization.

Our study have several limitations: a) an incidental -non-probabilistic- survey was performed, so the participants may not be representative of the whole population of Spanish psychiatrists; b) the sample size of the survey is relatively low, which is partially offset by a response rate of 100% (e.g. in study by Gorwood et al. was 13%); c) the context of the evaluation was a meeting sponsored by a pharmaceutical company and this could have some influence in the results. We also highlight the similarity of some opinions obtained by the two methods; this could be partially explained because the 42 participants in the focus groups also responded to the survey (representing 31.8% of the total). The main strength of the study is the mixed qualitative and quantitative approach on a wide range of psychiatrists throughout the Spanish geography, allowing a thorough investigation of their opinions in this field.

In conclusion, psychiatrists consider, both in the survey and through their own-speech, that setting the FR as a therapeutic target and implementing an optimum and comprehensive treatment focusing it can benefit patients with schizophrenia.

#### CONFLICT OF INTERESTS

These groups were held during the II VIVE Meeting, organized by Janssen Spain, in Alicante, in May 2014. Despite giving logistic facilities for its realization, Janssen was not involved in the study design, selection of subject categories nor in the interpretation of focal groups.

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- José Luis Galvez: Janssen-Cilag, Lundbeck, Servier, Pfizer and Rovi.
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