

Needs and values of outpatients with schizophrenia, treated with classic neuroleptics and risperidone

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The purpose of this study was to compare psychological functioning (especially needs structure and values hierarchy) of individuals diagnosed with paranoid schizophrenia treated with risperidone and those treated with classic neuroleptic medication. 30 outpatients (14 females and 16 males) with paranoid schizophrenia treated with risperidone and 30 matched treated with classic neuroleptics have been surveyed by using the Polish version of Adjective Check List (ACL), Stern Activities Index (SAI) and Rokeach Value Survey (RVS). It was found out that those afflicted with paranoid schizophrenia and treated with risperidone have greater intensity of felt needs and personality traits lending themselves to better psychological, personality and social adjustment and regard values associated with self-actualisation and coping in life higher than those treated with phenothiazine neuroleptics where the greater intensity of traits tied to worse psychological and personality adjustment was found which impede social adaptation.

Key words: paranoid schizophrenia, needs, values, risperidone, classic neuroleptics

Introduction

Risperidone is a second generation drug used in the treatment of schizophrenia. Many sources testify to its effectiveness in psychotic symptoms abatement and relative lack of objectionable negative side-effects. Current studies, those which establish efficiency levels of risperidone, generally focus on cognitive functioning applying National Adult Reading Test-NART, Wide Range Achievement Test-WRAT, Letter-Number Span Test-L-NST, Dot Test-DT, California Wisconsin Card Sorting Test-CWCST, etc. [1, 2, 3, 4, 5, 6, 7, 8, 9, 10], and psychopathological symptoms typically using: Brief Psychiatric Rating Scale-BPRS, Scale for Assessing Negative Symptoms-SANS, Positive and Negative Syndrome Scale-PANSS etc. [9, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26]. However, psychological and personality functioning of these outpatients have not been adequately studied, similarly in other psychoses. It is generally agreed that health and “well-being” is more than simple lack of unwanted disease symptoms; it necessarily includes biological, social and psychological good functioning. In the area of mental health, the self-actualisation capability is concerned

as a canon. Psychological functioning, beyond cognitive functions, includes motivation, emotions, needs and values which in no lesser degree determine normal, or more specifically, effective, creative and constructive functioning.

Aim

With the above in mind, the purpose of this study was to compare psychological functioning (especially needs structure and values hierarchy) of individuals diagnosed with paranoid schizophrenia treated with risperidone (Group „R”) and those treated with traditional or classic neuroleptic medication (Group “N”).

Characteristics of Participants

Study Group (R) consisted of 30 people suffering paranoid schizophrenia treated on an out-patient basis with risperidone in dosages ranging from 4 to 8 mg ($\bar{x}=4.5$ SD=1.2) over a period of 6 to 24 months ($\bar{x}=18$ SD=2).

The comparison Group (N) consisted of 30 people suffering paranoid schizophrenia treated on an out-patients basis with classic neuroleptic drugs (chlorpromazine-fenactil; levomepromazine-tisercin; fluphenazine-mirenil; perazine-pernazinum; perphenazine-trilafon; trifluoperazine-stelazine; chlorprothixen-haloperidol). They were dosed at 100 to 300 mg ($\bar{x}=200$ SD=50) of phenotiazines, converted to fenactil doses as indicated.

The characteristics of both groups are presented in Table 1. Both groups had equal distribution of sex, age, and education as well as intensity of psychopathological symptoms, according to the Clinical Global Impression Scale (CGI for Group N: 3.45 ± 0.51 ; for group R: 3.60 ± 0.50). The Study was carried out when the disease was in the remission phase with maintenance drug therapy applied. All prospective outpatients agreed to participate after they were informed of the Study’s profile and goal.

Methodology

For the purposes of this study, needs structure, values hierarchy, personality traits, and psychological functioning assessments were established by applying Polish versions of reliable and valid psychological diagnostic tools: 1) Adjective Check List (ACL), ap. I; [27, 28, 29, 30]; 2) Stern Activities Index (SAI), ap. II; [31, 32, 33]; 3) Rokeach Value Survey (RVS), ap. III; [34, 35, 36, 37, 38, 39].

Statistical Data Analysis

Scores gained using the above listed techniques were analysed statistically applying arithmetic average, standard deviation, and hypothesis testing. Because the distribution of the most of the variables is normal, the parametric test for testing statistical hypotheses was applied (t-test); where the distribution of the given variable was not

normal, non-parametric statistics were used (*U Mann-Whitney test*-in tables shown in *italics*) [40, 41, 42]. Statistical processing of initial individual surveys scores was done with the use of *Statistica 5.1 for Windows* [43].

Characteristics of participating groups

Table 1

VARIABLE		RISPERIDONE		NEUROLEPTICS	
		n	%	n	%
Sex	Female	14	46.7	14	46.7
	Male	16	53.3	16	53.3
Age	$\bar{x} \pm SD$	35.5 \pm 10.6		34.6 \pm 10.5	
	Range	20-65		20-65	
Disease duration	$\bar{x} \pm SD$	9.5 \pm 7.5		9.2 \pm 6.4	
	Range	1-25		1-24	
Number of hospitalizations	$\bar{x} \pm SD$	4 \pm 2		3 \pm 2	
	Range	1-14		1-11	
Educational Level	Elementary	3	10	2	6.7
	Trade	6	20	7	23.3
	Secondary	15	50	17	56.7
	University	6	20	4	13.3
Marital Status	Single	19	63.3	17	56.7
	Married	11	36.7	13	40
Residency	Urban	27	90	26	86.7
	Rural	3	10	4	13.3
Disorders intens.	Clin.Glob. Impr.	3.60 \pm 0.50		3.45 \pm 0.51	

Study results

Personal clinical interviews and observation were additionally applied to the psychometric tools, not only with the participants treated with risperidone, but also with their families. Both participants and their families confirmed marked improvement after the introduction of risperidone therapy, as compared to standard neuroleptic therapy, including psychological good-feeling, extrapyramidal and paranoid symptoms as well as social functioning. Many outpatients declared that they felt better under risperidone therapy than standard neuroleptic therapy, yet were unable to specify on the mentioned improvement. These responses were consistent with results gained through psychological testing carried out.

Needs and personality traits structure was surveyed with the use of ACL and SAI.

Results of individuals surveyed with ACL are presented in Table 2 and Chart 1. There are significant differences in Fav, Com (validity scales), Int, Cha (need scales), PAdj, ISS, Lab (topic scales), AC (transactional analysis scale) and A2 (High Origen-

Table 2

Comparison of average (\pm SD) scores in scales examining needs and other personality traits structure in ACL for outpatients with paranoid schizophrenia treated with classic neuroleptics and those with risperidone.

ACL SCALES	NEUROLEPTICS		RISPERIDONE		SIGNIFICANCE	
	x	SD	x	SD	t or U	p
VALIDITY SCALES						
MGk	42.48	12.38	45.82	16.29	17.160	<.05
Emu	49.59	11.14	46.66	11.84	-2.21	>.05
Unfiv	62.32	11.88	62.04	7.37	16.100	<.05
Com	36.63	11.88	41.38	11.88	-1.85	>.05
NEEDS SCALES						
Ach	41.14	11.61	41.84	11.57	-0.48	>.05
Dom	49.76	11.29	46.31	11.31	-4.49	<.05
Emu	47.00	11.30	60.76	10.06	14.160	<.05
Ord	49.76	11.39	51.39	11.84	-1.86	>.05
Int	49.22	11.51	50.39	11.34	-2.30	>.05
Nur	51.22	11.83	52.38	11.22	-0.88	>.05
AIT	49.52	11.36	49.21	11.66	-1.24	>.05
Hst	41.82	11.67	41.86	11.66	-0.02	>.05
Exh	49.41	11.26	46.51	11.21	-4.03	<.05
Aut	49.21	11.31	46.66	11.86	-4.11	<.05
Dom	49.22	11.64	49.64	11.11	-0.89	>.05
Chu	38.83	11.83	41.86	11.85	-4.35	<.05
Suc	49.85	11.26	51.81	11.61	-1.36	>.05
Aba	42.31	11.26	51.31	11.84	-11.11	<.05
Def	56.63	11.35	51.25	11.39	-4.29	<.05
TOPIC SCALES						
CRS	54.11	11.69	51.81	12.51	-0.81	>.05
Scm	55.84	11.41	55.71	11.31	-0.36	>.05
Scf	49.11	11.21	49.21	12.14	-0.21	>.05
Fid	41.83	11.51	50.39	11.21	-8.01	<.05
ES	49.76	11.81	50.21	11.21	-0.59	>.05
CRS	41.88	11.13	46.64	11.62	-4.51	<.05
MUS	49.44	11.89	49.51	11.86	-1.11	>.05
Uba	43.86	11.83	49.81	11.84	-6.84	<.05
Fem	49.56	11.83	49.88	11.81	-0.38	>.05
Lab	49.76	11.32	49.61	11.21	-0.21	>.05
TRANSACTIONAL ANALYSIS SCALES						
CP	50.81	11.81	49.66	12.21	1.24	>.05
NP	49.63	11.11	49.22	11.21	-0.21	>.05
A	49.81	11.13	49.81	11.55	-1.02	>.05
EC	38.21	11.83	38.82	11.62	-0.62	>.05
AC	51.11	11.84	51.86	11.81	1.13	>.05
NEISH SCALES						
A1	49.84	11.25	49.11	11.11	-0.31	>.05
A2	42.86	11.26	60.21	11.21	17.160	<.05
A3	49.26	11.22	51.11	11.81	-1.81	>.05
A4	49.84	11.22	49.22	11.54	-1.11	>.05

High Intellectence; Welsh) scales.

Patients in group "R" achieved significantly higher scores in the validity scale Fav, assessing the tendency to gain social acceptance, and Com, dealing also with

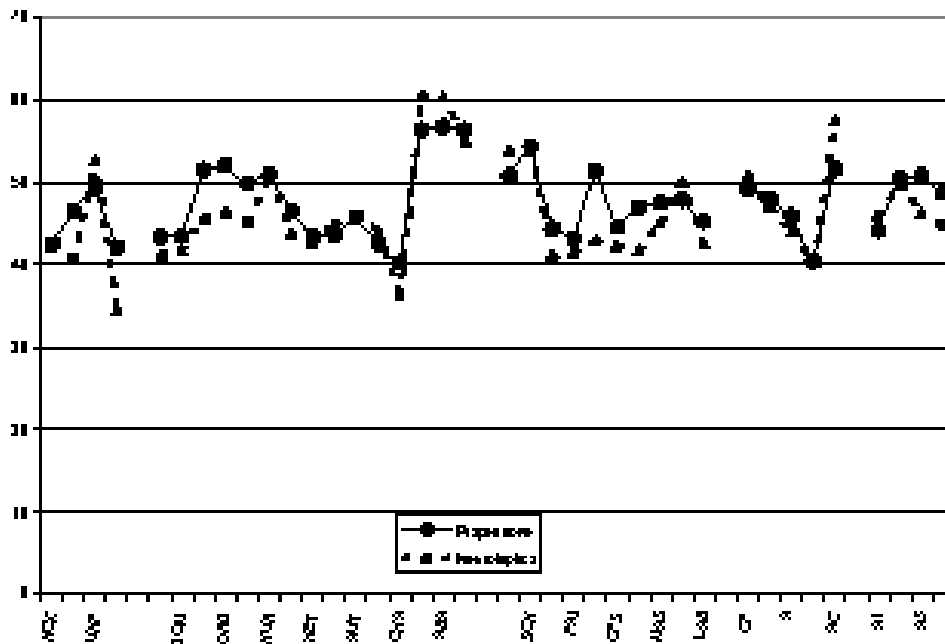


Chart 1. Needs and other personality traits structure in ACL for those afflicted with paranoid schizophrenia, treated with classic neuroleptics, and risperidone

relations with other people.

Patients treated with "R" achieved higher scores in Int scale assessing involvement and understanding their own behaviour as well as others; in the PAdj and ISS scale measuring personal adjustment and ideal self; Lab scale measuring spontaneity and flexibility; and Cha scale measuring need for change.

They also have higher scores in the A2 scale, dealing with independence in thinking and perception.

Their scores in the AC scale indicate greater autonomy, independence and pursuit of success and power.

It was also confirmed that these patients had lower scores in the Aba scale measuring need of self-humiliation but this difference did not attain statistical significance ($p=0.065$).

Summarising the results of those examined, we can conclude that those treated with risperidone attained a higher degree of intra-psyche and interpersonal adjustment than those treated with standard neuroleptics [27, 28, 29, 30].

Table 3

Comparison of average scores (\pm SD) in scales examining needs and other personality traits structure in SAI of patients treated with classic neuroleptics and risperidone

SAI SCALES	NEUROLEPTICS		RISPERIDONE		SIGNIFICANCE	
	\bar{x}	SD	\bar{x}	SD	t or U	p
Attention-Diversion	4.77	1.98	4.67	2.01	133.00	ns.
Emotional-Blissful	5.16	2.07	4.88	1.83	0.39	ns.
Homosocial Interests	5.29	2.86	4.87	3.03	161.00	ns.
Facilitation (Facilitation)	5.55	2.42	5.32	2.15	-0.74	ns.
Sex	5.52	2.86	4.58	3.37	6.76	ns.
Emotion-Resistivity	5.61	2.17	5.08	1.56	1.00	ns.
Defendance	5.52	1.57	5.36	1.85	-1.16	ns.
Continuative-Discontinuity	5.52	1.84	5.37	2.09	-0.35	ns.
Dominance	4.76	2.44	4.97	2.83	96.00	0.01
Counteraction-Infavoidsance	5.26	2.21	3.88	2.27	2.27	0.02
Defence	6.94	1.39	6.29	2.03	1.39	ns.
Nurturance-Rejection, Seclusion	6.94	2.41	5.36	2.41	2.25	0.02
Affiliation-Rejection, Seclusion	5.10	2.33	5.50	2.48	-0.57	ns.
Safeness	4.87	1.86	5.38	2.58	-0.84	ns.
Exhibition-Infavoidsance	2.61	2.60	3.08	2.48	-0.67	ns.
Harm avoidance	7.58	2.22	7.08	2.57	0.76	ns.
Understanding	5.97	2.97	5.96	2.66	177.00	ns.
Endoconstriction (Reflectionness)	5.87	2.55	5.58	2.83	0.39	ns.
Narcissism	5.42	2.46	5.33	2.55	0.12	ns.
Achievement	5.10	2.57	5.21	2.32	-0.16	ns.
Subsistence-Autonomy	3.58	1.82	3.04	2.03	1.03	ns.
Abasement	5.39	2.42	3.92	2.57	2.17	0.03
Natural/Scientific Interests	4.87	3.47	4.66	3.13	177.00	ns.
Objectivity	6.52	2.46	7.00	1.91	-0.79	ns.
Play	4.19	1.82	4.79	2.28	-1.08	ns.
Change-Sameness	3.29	1.55	3.46	2.15	-0.33	ns.
Political Interests	3.84	2.46	3.50	2.46	0.42	ns.
Aggression-Blame avoidance	3.81	2.69	2.96	2.22	1.25	ns.
Order	6.13	3.27	6.33	2.79	-0.24	ns.
Emp. Heal	3.81	2.79	4.17	3.06	-0.45	ns.

Results of outpatients examined using SAI are presented in Table 3 and Chart 2.

Those treated with risperidone had significantly lower scores in scales measuring need for Dominance, need for Nurturance (and its opposite pole-n. Rejection, Seclusion) and need for Abasement.

They also gained significantly lower scores in scale measuring need of Counteraction (including its opposite pole-n. Infavoidsance). They also had lower scores regarding the scale measuring n. Harmavoidance establishing the main component of n. for Safeness in Murray's theory, but the difference did not reach statistical significance

($p=0.07$).

The results, according to SAI, indicate that those individuals treated with risperidone exhibit a balance between nurturance and rejection, seclusion, lower intensity of dominance and self-depreciation. In their relations with others, they take into account values and social expectations, as opposed to those treated with standard neuroleptics

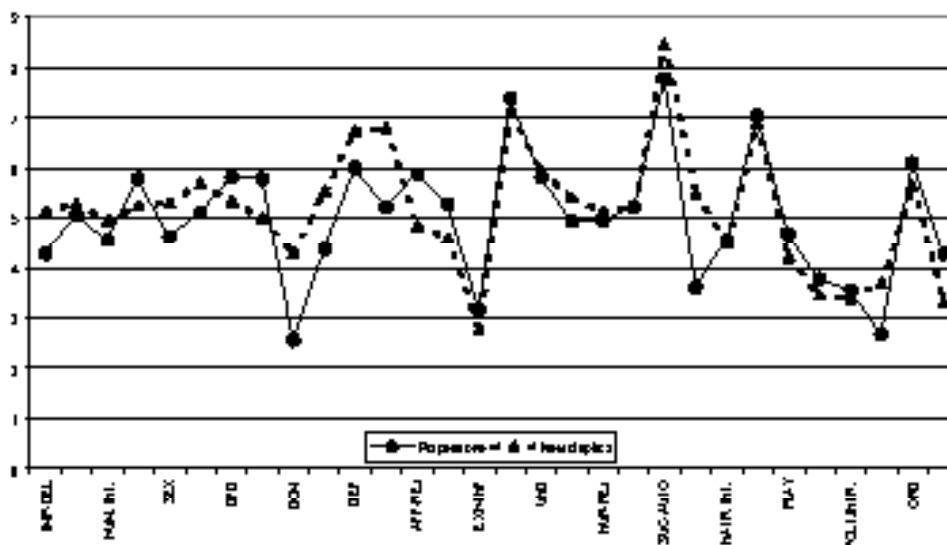


Chart 2. Needs and other personality traits structure in SAI of patients afflicted with paranoid schizophrenia, treated with classic neuroleptics, and risperidone

[31, 32, 33].

Values hierarchy study results

To study the value hierarchy, RVS was used and the results are presented in Tables 4, 5 and Chart 3. Consistent with the instructions, the person being surveyed must rank values from 1 to 18; one being the most important value, 18 the least. The rank scale is ordinal and therefore greatly limits statistical analysis. Consequently, these ordinal rankings are then standardised to z scores according to the Hayes formula [39].

Table 4 indicates the most important terminal values, i.e. the most important life goals for outpatients with paranoid schizophrenia being treated with risperidone; they are: taking care of loved ones, mature understanding of life, sexual and spiritual intimacy, and prosperous life. The least important indicated were equality, respect, beauty of nature and the arts, and exciting life. For instrumental values i.e. most general modes of behaviour, the most important were honesty, love and tenderness, responsibility and reliability, and industry and aspiration. Least important in this category were courage, open-mindedness, willing to pardon others and obedience.

Patients in group "R" indicated, regarding Terminal Values, that they rated taking care of loved ones, sexual and spiritual intimacy, and comfortable life higher than those in group "N". They also rated close companionship, brotherhood and eternal

Table 4

Values hierarchy (ranks) of outpatients with paranoid schizophrenia treated with risperidone

Lp	TERMINAL VALUES	\bar{x}	INSTRUMENTAL VALUES	\bar{x}
1	Family Security	2.50	Honest	5.00
2	Utterance	5.04	Indigo	4.75
3	Mature Love	5.33	Responsible	4.00
4	National Security	4.75	Ambitious	7.37
5	A Comfortable Life	7.50	Clean	8.04
6	World at Peace	7.79	Intellectual	8.39
7	Inner Harmony	8.04	Self-Controlled	8.42
8	Self-Respect	8.08	Independent	8.42
9	Happiness	8.75	Logical	8.71
10	True Friendship	8.71	Faith	8.02
11	Freedom	8.71	Helpful	10.33
12	A Sense of Accomplishment	12.38	Cheerful	10.53
13	Salvation	12.03	Courageous	10.58
14	Equality	12.02	Capable	10.79
15	Peace	13.08	Imaginative	10.02
16	Social Recognition	13.08	Spontaneous	11.08
17	A World of Beauty	13.54	Formal	12.17
18	An Exciting Life	14.17	Cherful	12.03

Table 5

Comparison of average (\pm SD) of values hierarchy using RVS on outpatients treated with classic neuroleptics and risperidone.

TERMINAL VALUES	NEUROLEPTICS		RISPERIDONE		SIGNIFICANCE	
	\bar{x}	SD	\bar{x}	SD	t _{obs} /U	P
National Security	-1.07	0.88	-0.76	1.13	180.00	ns
Family Security	-0.78	0.87	-1.35	0.46	133.00	0.004
Mature Love	0.17	0.39	-1.57	0.88	3.02	0.003
A Comfortable Life	0.42	0.79	-0.24	0.84	3.05	0.003
Utterance	-0.45	0.68	-0.71	0.38	1.70	ns
A Sense of Accomplishment	0.90	0.66	0.57	0.74	19.30	ns
Self-Respect	-0.15	0.78	-1.15	0.52	-0.00	ns
World at Peace	-0.75	0.76	-0.37	1.20	1.62.00	ns
True Friendship	-0.75	0.40	-0.00	0.49	133.00	0.04
Peace	0.59	0.69	0.65	0.76	-0.38	ns
Inner Harmony	0.00	0.74	-0.26	0.79	1.26	ns
Equality	-0.08	0.74	0.54	0.77	-2.81	0.006
Happiness	-0.25	0.75	-0.14	0.57	-0.69	ns
A World of Beauty	0.80	0.51	0.65	0.60	-1.62	ns
Social Recognition	0.83	0.76	0.68	0.69	-0.44	ns
Freedom	-0.08	0.34	-0.02	0.60	-0.31	ns
Salvation	-0.15	1.45	0.61	1.14	-2.15	0.03
An Exciting Life	1.77	0.75	0.88	0.83	138.00	ns

INSTRUMENTAL VALUES	NEUROLEPTICS		RISPERIDONE		SIGNIFICANCE	
	x	SD	x	SD	t/df	p
Ambitious	-0.30	1.30	-0.30	0.96	155.50	na
Clean	-0.28	1.05	-0.20	0.94	-0.11	na
Intellectual	0.52	0.78	-0.34	1.03	3.88	0.0007
Loving	-0.77	0.79	-0.59	1.17	175.00	na
Logical	-0.00	0.83	-0.01	0.95	0.05	na
Independent	0.17	1.00	0.03	0.73	0.57	na
Imaginative	0.35	0.88	0.22	0.96	0.90	na
Responsible	-0.33	0.75	-0.47	0.89	170.50	na
Courteous	0.18	0.78	0.30	0.89	-0.77	na
Self-controlled	0.07	0.83	0.08	0.84	-0.08	na
Broadminded	0.38	0.87	0.38	0.83	0.85	na
Chivalry	0.37	0.86	0.76	0.77	150.00	na
Humble	-0.26	0.73	0.16	0.67	-2.28	0.02
Obedient	0.01	1.14	0.61	0.98	-2.09	0.04
Honest	-0.76	0.78	-0.69	0.97	167.00	na
Poised	-0.42	0.77	0.09	0.84	-2.32	0.02
Capable	0.60	0.85	0.18	1.00	1.71	na
Forgiving	-0.09	1.19	0.34	1.02	-1.41	na

life significantly lower.

Regarding Instrumental Values, "R" patients rated intellectually notably higher than patients in group "N"; working for the welfare of others and courteous noticeably

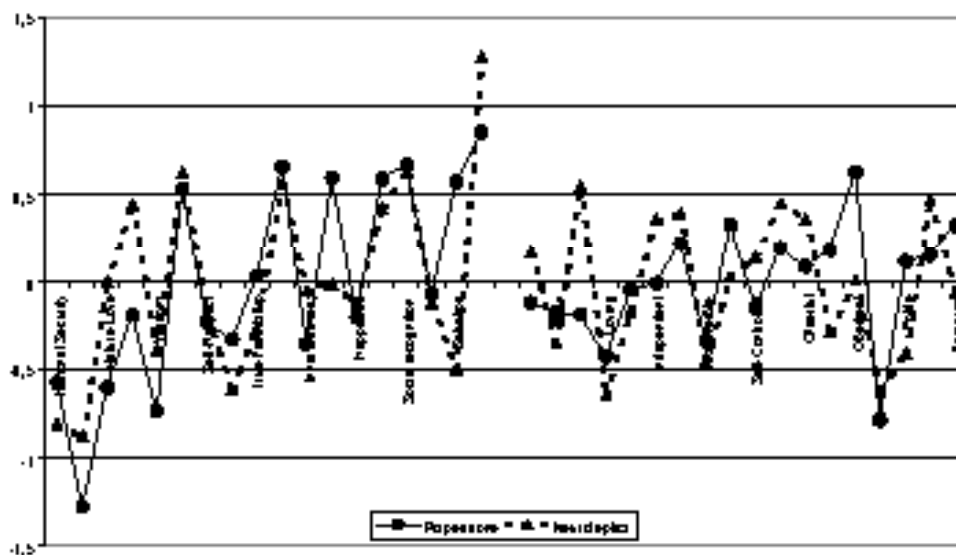


Chart 3. Values appraisal using RVS in outpatients with paranoid schizophrenia treated with standard neuroleptics and risperidone.

lower respectively, as well as obedient.

Summarising the study results on values hierarchy, it can be concluded that those individuals treated with risperidone rated Competence values, associated with Self-actualisation and Direct Gratification, higher than those treated with standard neuroleptics; and placed lower importance on Interpersonal and Social Values associated with Religious Morality and Self-restraint [34, 35, 36, 37, 38, 39].

Discussion of results

As mentioned initially, there is a lack of studies regarding psychological and personality functioning in international periodicals, especially on needs structure and values hierarchy of outpatients with paranoid schizophrenia treated with risperidone. This is significant in that currently it is felt that the help and psycho-social rehabilitation that is offered to the afflicted should be adjusted to the individual needs and psychological resources of the patient i.e. values, experience, feelings and goals of the patient should shape the scope or direction of treatment in all phases of therapy-rehabilitation. Furthermore, therapy and rehabilitation will fail if only deficits are examined; life goals and patient skills must be taken into account [16].

Based on this study results done by the authors, it can be suggested those outpatients treated with standard neuroleptics experience greater psychological and personality problems (“N”) than those treated with risperidone (“R”).

With the above in mind, outpatients in group “R” exhibit more cheerfulness in their interpersonal relations and are sensitive to their partner; patients in group “N” are much less so (Fav and Com in ACL).

Those outpatients, treated with risperidone are more involved in understanding their own behaviour and that of others, displaying greater intellectual efficiency, gladly undertaking tasks related to intellectual exertion (Int). They also display more spontaneity and eagerly feel the need for change and new experiences (Lab, Cha). It is worth mentioning that cognitive dysfunctions make outpatients rigid or ‘wooden’ in attitudes and behaviour [44]. Furthermore, it is characteristic of outpatients with paranoid schizophrenia, treated with classic neuroleptics, a tendency to avoid change and a desire for stability i.e. no change [45, 46, 47, 48, 49]. They display more independence and pursuit for success (AC in ACL) and have greater achievements in cognitive functioning (A2 in ACL).

Those afflicted and treated with risperidone display lower needs for controlling, influencing and steering people (n. Dominance, SAI); this need in pathological form relates to delusions, mainly of omnipotence and grandiosity.

In the “R” outpatient group there is a balance between the tendency to care for others and isolate oneself from them (n. Nurturance-n. Rejection, Seclusion). Outpatients in the “N” group demonstrate a greater need to care for someone.

Outpatients with paranoid schizophrenia treated with risperidone have a feeling of inferiority in a lesser degree. They have also lower tendencies to self-depreciation and abasement (n. Abasement).

Outpatients treated with risperidone have a higher impetus to avoid failure, embarrassment, humiliation, which may result from their higher self-esteem (n. Counterac-

tion-n. Infavoidance; see ISS, PAdj, in ACL and n. Abasement in SAI).

They also have a greater feeling of safety as opposed to those treated with standard neuroleptics (n. Harmavoidance, the main factor of need for safety according to Murray's theory).

A result which is difficult to interpret is the MAS (higher), and FEM (lower) scale in ACL (near statistical significance) which assess traditional male/female traits and interests, all the more difficult after confirmation of heightened prolactin levels [51, 52]. This is meaningful because similar differences occur in the MF and FEM Scale, in sub-scale MF2 in the MMPI [46, 48, Tsirigotis K., Gruszczyński 2003, in review]. If to determine the case according to psychological gender theory, one might risk the suggestion that "female" behaviour requires less dynamism, energy and expansivity; maybe the classic neuroleptics stifle not only psychopathology symptoms but also "life expansivity" [52, 53, 54, 55].

Specific personality traits and felt needs confirmed above yield a particular values hierarchy. The most important terminal values i.e. most important life goals for those afflicted with paranoid schizophrenia and treated with risperidone are: taking care of the loved ones, mature understanding of life, sexual and spiritual intimacy and freedom from inner conflict. The least important are: equality, respect, beauty of nature and the arts and exciting life. Regarding Instrumental Values i.e. most general modes of behaviour, the most important for "R" are: honesty, responsibility and reliability, love and tenderness, and industry and ambition (see: ability to love and work, PAdj in ACL). The least important were: courage, open-mindedness, willing to pardon others and obedience. We can assert that they regard Family Safety (Family Security, Ambitious, Responsible) higher than Social Safety (A Word of Beauty, Equality, Imaginative), seen as the V di-poled factor established by Rokeach; they also regard Love (Mature Love, Loving) higher than Respect (Social Recognition, Self-respect) as the VI di-poled factor. The values associated with self-actualisation i.e. Wisdom and Responsibility were also important to the "R" group.

They rated sexual and spiritual intimacy, prosperity and welfare, mature understanding of life, and exciting life higher than those in group "N", and equality, eternal life and close friendship lower. A strong attitude regarding religion, see: REL in MMPI; [46, 47, 48, 49], a high rank for Salvation (RVS) and strong need for safeness (n. Harm in SAI) are related to one another: in their search for safeness, those afflicted treated with classic neuroleptics succumb to deep, if not fanatical, religious reflections and practice [45, 46, 47, 48, 49]. As Maslow [56] stated, creating philosophical, ideological and religious systems fulfil, among others, satiation of the needs of safeness.

In the "R" group care for loved ones, lasting contribution, intellectual pursuit and prosperity were more essential for them, whereas contentedness was less important.

Among Instrumental Values they rated intellectual pursuit higher, and offering help, civility and courtesy, and obedience lower.

Summarising the discussion on the study's results focusing on Values Hierarchy, one can assert that those examined and treated with risperidone in this study, in comparison with those treated with standard neuroleptics, rate competency values associated with self-actualisation and direct gratification higher than interpersonal and social values,

tied with religious morality, and self-restraint [34, 35, 36, 37, 38, 39]. Based on the study's results, we infer that those afflicted with paranoid schizophrenia and treated with risperidone cope with their life experience more effectively in the majority of situations.

It was apparent that patients in the "R" group had greater agreement between the ideal-self and real-self which, in consequence, influences personality adjustment in interpersonal relations; as in accomplishing aims. They can adjust relatively easily to the required posture of any given environment, cope with social problems, and function better in social roles, including professional/vocational roles (ISS in ACL). The issue of self-esteem is important as outpatients with delusional disorders have a negative one [57]. It is not without meaning that less weight gain reinforces better self-image and the possibility of reintegration (return) to the community [51].

Their personality adjustment is better; they have a positive attitude towards life; more optimism; display more goodwill towards others, initiatives and effectiveness in their activities. The ability "to love and work" characterises them to a greater degree which is a deciding criterion regarding appropriate social adjustment (PA_{adj} and ISS in ACL).

The presented results indicate that outpatients with paranoid schizophrenia treated with R have fewer symptoms of internal maladjustment and psychological discomfort than the ones treated with classic neuroleptics. Furthermore, those treated with risperidone are better adjusted, cope with everyday life problems better, have a positive self-esteem and believe in themselves. Hence, they have higher adaptation potential (especially in social situations), possess many psychological resources which can be taken advantage of in therapy and rehabilitation. The similar results pertaining to "inter-psychoic resources" and "psychological functioning" were obtained in other studies [58].

Summarising the results of the study, we can assert that those individuals afflicted with paranoid schizophrenia and treated with risperidone are characterised with a higher degree of intra-psychoic and interpersonal adjustment capacity, as opposed to those treated with standard neuroleptics.

To a lesser degree, they have some feeling of inferiority and guilt; are not susceptible to self-depreciation, self-humiliation and submissiveness (A_{ba} in ACL and SAI). They seem to be guided by tendencies to overcome adversity through constant effort, as well as a desire to avoid embarrassment and humiliation (n. Counteraction-n. Inavoidance).

Conclusions

Based on the above results of the psychological study we can formulate the following conclusions:

1. It has been confirmed in outpatients suffering from paranoid schizophrenia and undergoing treatment using risperidone that they have greater intensity of felt needs and personality traits lending themselves to better psychological, personality and social adjustment than those treated with phenothiazine neuroleptics where the

greater intensity of traits tied to worse psychological and personality adjustment was found, which impede social adaptation.

2. Those treated with risperidone regarded values associated with self-actualisation and better coping in life whereas those outpatients treated with phenothiazine neuroleptics regarded social and interpersonal values related to self-restraint, reinforcing tendencies of social withdrawal restricting an active lifestyle.

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