

Online supplement DS1

Analysis of attrition

Methods

To analyze attrition, we investigated whether persons with psychotic disorders who had participated in the spirometry measurements differed from non-participants. For this purpose we used information from the Major Symptoms of Schizophrenia Scale (MSSS)^{48,49} and some global ratings from the Scale for the Assessment of Positive Symptoms (SAPS)⁵⁰ and the Scale for the Assessment of Negative Symptoms (SANS)⁵¹ that had been filled out on the basis of the SCID interview and all medical records on a lifetime basis.⁵² All MSSS symptom, course and outcome ratings were used in the analysis; in addition to the Global Rating of Bizarre Behaviour from SAPS, and the Global Rating of Avolition-Apathy and of Anhedonia-Asociality from SANS. The symptoms in the MSSS are rated on a scale of 1 (= absent) to 5 (= extremely severe); and the symptoms in the SANS and SAPS on a scale of 0 (= not at all) to 5 (=severe).⁵² Differences between participants and non-participants were tested with the Kruskal-Wallis test, as the MSSS, SANS, and SAPS ratings were ordinal. Differences in the gender distribution between participants and non-participants were tested with the χ^2 -test and differences in age with the *t* test. Analyses were completed using the SAS software system version 9.1 (SAS Institute, Cary, NC).

Results

Participation rates for spirometry are presented in Table DS1. To be precise, the number of acceptable results obtained is presented instead of the actual participation rate; many spirometry results had to be discarded because they did not meet the set quality criteria (e.g. due to failure in spirometry technique).

No gender differences were found between the participants and non-participants with schizophrenia or ONAP. However, of women with affective psychosis, only $n = 10/23$ (43.5%) participated in spirometry compared to $n = 23/26$ (88.5%) of men ($P < 0.001$). Compared to participants, non-participants with both ONAP (64.9, s.d. = 16.7 vs. 54.2, s.d. = 14.1; $P = 0.002$) and affective psychosis (62.8, s.d. = 20.2 vs. 52.5, s.d. = 13.3; $P = 0.037$) were significantly older; no corresponding significant difference was found for participants with schizophrenia.

Among participants with schizophrenia, non-participants had a less favourable outcome of the

disorder (mean 3.2, s.d. = 0.9 vs. 2.7, s.d. = 0.7; $P = 0.013$), as well as more severe symptoms in the following symptom variables compared to participants: positive formal thought disorder (3.2, s.d. = 1.0 vs. 2.4, s.d. = 1.0; $P = 0.004$), negative formal thought disorder (2.8, s.d. = 0.9 vs. 2.2, s.d. = 1.0; $P = 0.034$), catatonic behaviour (2.1, s.d. = 1.2 vs. 1.5, s.d. = 1.0; $P = 0.008$), manic symptoms (1.5, s.d. = 0.6 vs. 1.2, s.d. = 0.5; $P = 0.037$), and affective deterioration (3.3, s.d. = 1.1 vs. 2.4, s.d. = 1.0; $P = 0.003$). As an exception, non-participants had less severe depression compared to participants with schizophrenia (1.8, s.d. = 0.7 vs. 2.3, s.d. = 0.7; $P = 0.016$). Among persons with ONAP, no differences were observed in any symptom or outcome measure between the participants and non-participants. As to participants with affective psychosis, there existed some differences between those who did participate in the spirometry measurements and those who did not: non-participants had more severe negative formal thought disorder (1.9, s.d. = 1.0 vs. 1.2, s.d. = 0.4; $P = 0.002$), affective deterioration (1.5, s.d. = 0.5 vs. 1.2, s.d. = 0.4; $P = 0.042$) and depression (4.1, s.d. = 0.7 vs. 3.4, s.d. = 1.0; $P = 0.016$) compared to participants.

Table DS1 Participation in different measurements and phases of the survey^a

	Participants without psychotic disorder	Schizophrenia	ONAP	Affective psychosis ^b
	<i>n</i> (%)	<i>n</i> (%)	<i>n</i> (%)	<i>n</i> (%)
n, total	7825	67	87	49
Home interview	6903 (88.2)	61 (91.0)	78 (89.7)	45 (91.8)
Symptom interview	6464 (82.6)	54 (80.6)	73 (83.9)	40 (81.6)
Serum cotinine	6526 (83.4)	54 (80.6)	71 (81.6)	40 (81.6)
Clinical examination	6208 (79.3)	50 (74.6)	59 (67.8)	37 (75.5)
Spirometry^c	5914 (75.6)	43 (64.2)	57 (65.5)	33 (67.3)

ONAP, other non-affective psychotic disorder.
a. The table presents the unweighted numbers and percentages of participants.
b. The affective psychosis group comprised 29 participants with major depressive disorder and 20 with bipolar I disorder.
c. For spirometry, the table shows the number of acceptable results obtained; not the participation rate.

Additional references

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