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Data Article

Data on adherence to medication in neurological patients using the German Stendal Adherence to Medication Score (SAMS)

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ABSTRACT

This article presents demographic, socio-economic and detailed adherence to medication data from 429 patients with neurological disorders. Adherence to medication was assessed using the German Stendal Adherence to Medication Score (SAMS). The SAMS questionnaire includes 18 questions forming a cumulative scale (0 – 72) in which 0 indicates complete adherence and 72 complete non-adherence. The SAMS covers different aspects of adherence/non-adherence, such as intentional modification of medication, missing knowledge about reasons/dosage/timing of medication and forgetting to take medication. The dataset allows determining different reasons and clusters of adherence to medication. The dataset can be used as by clinicians, pharmacists and academia for further research and as reference. The dataset can also be used in a large range of other topics where demographic and socio-economic parameters are relevant. The data presented herein is associated with the research article "Clusters of non-adherence to medication in neurological patients" [1] and available on Mendeley https://data.mendeley.com/datasets/ny2krr3vgg/1.

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Specifications table

Subject area	Medicine
More specific subject area	Health Services Research
Type of data	Table, link
How data was acquired	Survey using the German Stendal Adherence to Medication Score (SAMS). Data from 429 patients with neurological disorders were collected (consecutive sampling) either during their visit to the outpatient clinic or during their stay on the neurological ward in the Department of Neurology at the Jena University Hospital.
Data format	Raw
Experimental factors	The criteria used for including patients in the study and how data were collected has been described in Prell et al., in press. (1)
Experimental features	Stendal adherence to medication questionnaire (SAMS) and demographical data were collected in patients with neurological disorders. Principal component analysis with Varimax rotation was used to determine independent factors explaining non-adherence to medication in these subjects.
Data source location	Department of Neurology, Jena University Hospital, Jena, Germany
Data accessibility	Mendeley Data – direct URL: https://data.mendeley.com/datasets/ny2krr3vgg/1 https://doi.org/10.17632/ny2krr3vgg.1
Related research article	Tino Prell, Julian Grosskreutz, Sarah Mendorf, Gabriele Helga Franke, Otto W. Witte, Albrecht Kunze. Clusters of non-adherence to medication in neurological patients. Research in Social and Administrative Pharmacy, 2019, https://doi.org/10.1016/j.sapharm.2019.01.001, in press [1]

Value of the data

- The data presented in this article provide information about patient-related factors for non-adherence to medication.
- The data can be used to investigate distribution and reasons for non-adherence in a mixed cohort of neurological patients.
- The data can be used by clinicians and academia for further research and as reference.

1. Data

The data article presents demographical, clinical data and data from a self-report adherence questionnaire. In total, data from 429 subjects are provided (age 63, SD = 16, 240 male, 189 female) who took an average of 6 (SD = 3) drugs per day. The majority of patients were married (275 married, 77 widowed or divorced, 69 single, 8 missing data), pensioned (317 pensioned, 88 employed, 22 unemployed, 2 missing data) and had graduated from high schools or college (157 German Realschule, 153 German Abitur and/or university, 116 German Hauptschule or no school, 3 missing data). The mean SAMS was 6.9 (SD = 9) points. According to the SAMS total score 74 (17.2%) reported to be fully adherent (SAMS = 0), 252 (58.7%) showed moderate non-adherence (SAMS 1–10) and 103 (24%) clinical significant non-adherence (SAMS > 10).

2. Experimental design, materials, and methods

Data from 429 patients were collected (consecutive sampling) either during their visit in the outpatient clinic or during their stay on the neurological ward in the Department of Neurology at the Jena University Hospital between January and May 2018. All subjects gave written informed consent and the study was approved by the ethics committee of the Jena University Hospital, Jena, Germany. Neurological disorders mainly comprised movement disorders, cerebrovascular disorders, epilepsy, peripheral neurological disorders, inflammatory central nervous disorders.

Adherence was assessed using the German Stendal Adherence to Medication Score (SAMS) (Table 1). It is an extension of the validated German Essen Compliance Score [2–4]. The SAMS includes 18 questions forming a cumulative scale (0 = complete adherence to 72 = complete non-adherence). The SAMS covers different aspects of adherence/non-adherence: intentional modification of medication (items 8–13, 17), missing knowledge about reasons/dosage/timing of medication

Table 1
Stendal adherence to medication score (SAMS).

		for all	for most	for half	for some	for none
		0	1	2	3	4
1	Do you know the reason for taking your medication?					
2	Do you know the dosages of your medication?					
3	Are you familiar with the timing for taking the medication?					
		all	most	half	some	none
		0	1	2	3	4
4	Do you take your medication regularly?					
5	Do you know the names of medications you are taking?					
		never	rare	sometimes	often	mostly
		0	1	2	3	4
6	Do you forget to take your medication?					
7	Are you untroubled about taking the medication?					
8	Do you stop taking your medication when you feel better?					
9	Do you stop taking your medication if you sometimes feel worse after taking the medication?					
10	Do you take any wrong or other/unprescribed medications (such as those of your partner)? If you think you have side effects due to of the medications (such as tremors, nausea etc.)					
11	- do you reduce the dose without consulting a doctor?					
12	- do you not take the medication for a while, i.e. take a break?					
13	If you feel you have to take too many, do you stop taking those medications you consider to be less important than the others without consulting your doctor? If you forget or omit your medication, do you forget it …					
14	in the morning?					
15	at noon?					
16	in the evening?					
17	Do you deliberately not take medications you do not consider important, but take the rest?					
18	If you take medication as a syringe or a weekly tablet, have you ever forgotten it?					

(items 1–3, 5), forgetting to take medication (items 14–15). The presented data provides the 18 SAMS items and SAMS total score from each subject. Demographical data provided in the dataset include: age, gender, marital status, living situation, level of education, occupation, medical history such as diseases and details of their medication (whether medication was self-administered or who takes care of their daily medication, and also total daily number of medications administered in any pharmaceutical form).

There is no established threshold to determine non-adherence. It is generally considered that suboptimal adherence becomes clinically significant when < 80% of prescribed medication is taken [5–8]. Across several highly prevalent chronic diseases 0.80 was found to be a reasonable and valid cut-off point that stratifies adherent and non-adherent patients based on predicting subsequent hospitalization [8]. This leads to a study- and sample-specific SAMS cut-off of 10 points for a clinical meaningful/significant non-adherence in the current dataset. The patients can then be categorized into i) fully adherent (SAMS = 0), ii) moderate non-adherent (SAMS 1–10) and non-adherent (SAMS > 10).

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Transparency document

Transparency document associated with this article can be found in the online version at https://doi.org/10.1016/j.dib.2019.103855.

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