



## Letter to the Editor

## Acute psychosis in a polyglot: Linguistic regression to the mother tongue and restoration



To the editor,

Bilingual patients with schizophrenia may demonstrate interesting neurolinguistic phenomena. Reports have described differential loss of daily-use, second language and exclusive use of the mother tongue during episodes of acute psychosis (Heinemann and Assion, 1996; Hughes, 1981), differential expression of psychotic symptoms across two languages (Schoeman et al., 2008), and more prominent auditory hallucinations and thought disorder in one language, usually the first language (Hemphill, 1971). These reports concern the relationship, comparison, or transition between two languages; however, the course of patients with schizophrenia who are trilingual or more is less well understood, especially in terms of neurolinguistic aspects. To my knowledge, only Kalinowsky (1982) has reported a case involving a trilingual woman with schizophrenia who demonstrated selective aphasia during electroconvulsive therapy. Here, I report a case of a trilingual patient with schizophrenia who presents with selective aphasia during episodes of acute psychosis.

The patient is a 47-year-old Filipino woman who is a native speaker of Tagalog. She acquired English through school education and could use it without difficulty. She subsequently acquired Japanese in her twenties, which she used at the same level as her English.

Her first psychotic episode arose in her late thirties. After admittance to a psychiatric hospital in the Philippines, she achieved remission in 3 months. Remission was maintained with antipsychotic medications.

One year before the present admission, she had come to Japan to find work. Once in Japan, she stopped taking her medications. She simultaneously worked two part-time jobs, where she spoke Japanese without any difficulty. However, 1 month before admission, she manifested with insomnia and severe anxiety, followed by exacerbation of delusions of pursuit and auditory hallucinations. She became unable to work and had to be cared for by her sister who was also living in Japan. She ultimately exhibited catatonic stupor and was admitted to hospital in Japan.

She intermittently cried and spoke loudly in Tagalog and responded when her sister spoke to her in Tagalog. However, her speech was so incoherent that even her sister could hardly communicate with her. A 2-week course of antipsychotic medication improved the catatonia. She subsequently reported anxiety, delusions of pursuit, and auditory hallucinations. During this period, she talked with her sister in Tagalog but spoke only English with medical staff, requiring us to communicate with her in English. As treatment mainly with oral paliperidone led to remission of these symptoms, she came to use Japanese in the daily medical interview. She recalled the period when she could converse with us only in English because she could not understand Japanese, adding how helpful it was to be spoken to in English by the doctors and nurses. She was discharged on hospital day 73, at which time she spontaneously spoke Japanese as before.

In the middle stage of hospital treatment, the patient demonstrated aphasia only in Japanese (L3: third language). This can be understood as selective aphasia, defined as the presence of aphasic symptoms in only one language without deficits in another language (Paradis, 2004). Before this, she had been in a catatonic state and cried and spoke only in Tagalog (L1: mother tongue). She was probably aphasic in English (L2: second language) as well as in Japanese (L3) at that time and thus manifested linguistic regression to the mother tongue. Although the regression probably began at the onset of exacerbation 1 month before admission, the detailed course of the regression is not clear: her contact was limited to her sister and she had little opportunity to use L2 or L3. However, the course of her recovery is known in detail: she presented sequential restoration of the language loss in the order of acquisition (L2→L3) as she recovered from psychosis.

Many factors are known to influence language acquisition and consequently its loss in neuropsychiatric disorders, specifically, order of learning, degree of proficiency, extensiveness of language use, affective component of the language, and general condition (Hughes, 1981). Language competence has been reported to vary with the severity of psychosis (Toppelberg, 1996). Patients who are bilingual when they are stable are often unable to express themselves in their L2 during an episode of acute psychosis (Oquendo, 1996). Indeed, it is difficult to discuss selective aphasia and its recovery with respect to a single factor only. However, the clinical course in the present case suggests that the later a language is acquired, the more readily its competence is affected in psychosis, and that even languages acquired earlier become vulnerable to aphasia as psychosis worsens.

We should be cognizant that polyglot patients may not always be able to use the language of the treatment environment during episodes of acute psychosis. It is necessary to assess which language patients can use to express themselves and to provide therapeutic support according to the severity of the psychosis.

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## Declarations of interest

None.

## Ethical statement

Written informed consent was obtained from the patient for publication of this case report. We pledged to abide by the Declaration of Helsinki. Approval from the institutional review board (IRB) was not obtained because the IRB does not require ethical approval for case reports of a single patient.

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## References

- Heinemann, F., Assion, H.J., 1996. Language regression to the mother tongue in polyglot patients with acute psychosis. *Nervenarzt*. 67 (7), 599–601 (In German).
- Hemphill, R.E., 1971. Auditory hallucinations in polyglots. *S. Afr. Med. J.* 45 (48), 1391–1394.
- Hughes, G.W., 1981. Neuropsychiatric aspects of bilingualism: a brief review. *Br. J. Psychiatry* 139, 25–28.
- Kalinowsky, L.B., 1982. Trilingualism. *Br. J. Psychiatry*. 140, 435.
- Oquendo, M.A., 1996. Psychiatric evaluation and psychotherapy in the patient's second language. *Psychiatr. Serv.* 47 (6), 614–618.
- Paradis, M., 2004. *A Neurolinguistic Theory of Bilingualism*. John Benjamins Publishing Company, Amsterdam/Philadelphia.
- Schoeman, R., Chiliza, B., Emsley, R., Southwood, F., 2008. Bilingualism and psychosis: a case report. *Schizophr. Res.* 103 (1-3), 333–335.
- Toppelberg, C.O., 1996. Psychiatric evaluation in a second language. *Psychiatr. Serv.* 47 (9), 1001–1002.

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