

## Benzodiazepine Overdose in a Non-English-Speaking Patient: Case Report on Cultural Competency and Asian Pharmacy Practices

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### ABSTRACT

*Physician training in cultural sensitivity is important for effective history taking, particularly in psychiatry. Added difficulty exists when working with non-English-speaking patients, in which culture plays a prominent role in the underdiagnosis of psychiatric illnesses, especially in Asian and Pacific Islander geriatric populations. An 81-year-old, non-English-speaking female with no psychiatric history was brought to the emergency department by her son after he discovered she ingested 8-10 tablets of alprazolam of unknown dosage in a 10-hour period. Upon questioning, the patient admitted she obtained the medication from China without a prescription to self-treat her anxiety and difficulty sleeping. This case study brings awareness to the accessibility and ease of acquiring medications in countries with inconsistently enforced drug regulatory policies, enumerates factors which influence self-medication, and illustrates potential danger of stigmatization and negative cultural perceptions toward psychiatric healthcare. Recognition of this scenario is critical to appropriately address psychiatric needs of non-English-speaking patients.*

### Keywords

Asian, Benzodiazepine, Mental health, Overdose, Alprazolam.

### Introduction

In the United States, medications are strictly regulated by the Food and Drug Administration, and many require a prescription to be fulfilled by a licensed technician and pharmacist at a registered pharmacy [1]. The same, however, cannot be said for pharmacies in many Asian countries, as differences in governmental oversight, technical training, and perceptions of Western medication has created a largely unregulated system with limited safeguards for patient safety [2-5]. Here we present a case of benzodiazepine overdose in a Cantonese-speaking-only patient, wherein she obtained the medication without physician prescription. Due to the stigmatization of mental health and psychiatric care in the Asian and Pacific Islander community, as well as increasing immigration and rising medication cost, the aim of this report is to highlight the need to understand a patient's medication history with a cultural context and to consider differences in prescribing practices on a global scale.

### Case Presentation

Ms. X is an 81-year-old Cantonese speaking-only female brought to the emergency department by her son after he discovered that she had ingested 8-10 tablets of Alprazolam (Xanax) of unknown dosage overnight in a 10-hour period. Her past medical history was significant for hypertension, hyperlipidemia, breast cancer s/p bilateral mastectomy 15 years ago, ovarian cancer s/p bilateral oophorectomy and hysterectomy 15 years ago, and chronic lower back pain. She states that she was concerned about arriving on time to an upcoming ophthalmology appointment due to a change in her transportation and thus was unable to sleep. She proceeded to take a dose of Xanax for which she has taken intermittently over the past 30 years for "anxiety" and "inability to sleep". She was unable to remember the timing of subsequent doses, but stated that the bottle had 10 pills remaining. Her son found her in the morning with an empty pill bottle and complained to him that she was "feeling cold and weak" and "unable to walk".

The patient and her son deny any prior psychiatric history, stating that she only takes the Xanax when feeling anxious and unable to

sleep. She denies any feelings of depression, anxiety, or suicidal ideation, with a negative Patient Health Questionnaire-2 and Hamilton Anxiety Rating Scale on intake. When asked in English about the physician that prescribed the Xanax or to see the pill bottle, both the son and patient, through translation from her son, were reticent about providing the information. After use of a Cantonese staff translator to emphasize the importance of this information, her son admits that the medication was purchased overseas without a prescription and that they no longer had the packaging. The patient had never been formally diagnosed with anxiety and her son stated that she had refused to see a psychiatrist due to potentially “losing face” in her community and the associated stigma associated with talking about psychiatric issues.

Vitals and physical exam were within normal range and unremarkable, without any signs of respiratory distress. Electrocardiogram was normal without axis deviation, arrhythmias, or evidence of cardiac pathology. Due to her unknown dosage, toxicology consultation recommended a 4-hour observation period for adverse effects. During this time, the patient and her son declined a psychiatric consultation to address her underlying anxiety symptoms. With no signs of respiratory depression and otherwise asymptomatic, patient was discharged home 4 hours later and educated regarding risks of overdose. She was also advised to follow-up with her primary care physician in regards to outpatient psychiatric evaluation for anxiety evaluation and management techniques.

## Discussion

Numerous factors influence self-medication practices around the world, ranging from insufficient medical facilities and resources, accessibility and ease of over-the-counter (OTC) drugs in the local market, and inconsistently enforced drug regulatory policies [6-9]. In many Asian and Pacific Islander countries, the delineation between the prescribing physician and the dispensing pharmacist are often blurred, which further complicates the doctor-patient relationship, especially when coupled with traditional Eastern medicine [10-12]. With convenience style dispensaries, patients can self-treat symptoms and receive medications from workers who have limited or no formal medical training [13,14]. With the reputation of Western medicine as an instant panacea to any ailment, prescription drug misuse and overuse in Asia has jeopardized global health with increased antibiotic resistance and substandard products [9,15-18]. Coupled with limited medical liability associated with malpractice, rates of admitted self-medication without prior diagnosis by a licensed health professional have skyrocketed to 4-7.5% of population in Asia compared to the 3% worldwide [19].

For many Asian and Pacific Islander cultures, acknowledgement of mental health and psychiatric illness is considered taboo, leading to a dearth of research in quantifying its effects and creation of targeted therapies [20]. As seen with Ms. X, many Asian and Pacific Islander cultures have the concept of “losing/saving face”, in which situations that demonstrate weakness should be avoided to maintain a positive reputation within the community [21-23].

Mental health is an intensely private affair, in which seeking help can translate as a sign of instability and/or inability for self-reliance and fortitude [20]. For immigrants with limited language abilities, the normally protective insular nature of their communities can also act as a barrier to seeking care due to a strong fear of social judgement and the associated stigma that accompanies mental illness [24,25]. In such situations, patients prefer to self-medicate and often avoid formal recognition and treatment, as Asian and Pacific Islander populations are three times less likely to seek out formal diagnosis and treatment of psychiatric illnesses [26-29]. This mentality of denial can present potentially dangerous situations as seen in this case.

It is important to be aware of such practices when working with immigrant populations who may possess medications that exist beyond US drug regulations [26-28]. Prescription drug tourism describes the practice of traveling to another country to avoid medication controls or to purchase them at a cheaper price [30]. Traditionally this practice has been associated with narcotics and long term maintenance drugs; however, it has been broadly used to also include herbal supplements and medications only produced in certain countries [29,30]. Patients that practice prescription drug tourism may not consider the medications obtained as relevant when eliciting a drug history as they were not officially prescribed by physicians or only take them intermittently [31]. In cases of overdose, there may also be a fear of legal consequences associated with the drug use, resulting in falsification or omission of information [32]. Clinical suspicion and cultural competency around the medication habits of non-native populations become valuable tools when assessing and addressing discrepancies in patient intake and care. Understanding and recognizing this can reduce delays in care and ensure prompt treatment.

## Conclusion

In working with immigrant, non-English speaking communities, it is important to recognize the unique beliefs and practices that may impact their medication history. This is particularly salient when these medicines are obtained outside of the United States and are not subject to the same regulations and restrictions. As seen in this case, the cultural perceptions around mental health and treatment likely contributed to the adverse outcome. Further research is needed to understand how to best serve these communities in a respectful and culturally competent manner.

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