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Section I: Background Information

Terminology and Perspective

The Socialist Republic of Vietnam is home to more than 54 ethnic groups with their own unique identities and cultures. People from Vietnam are referred to as Vietnamese. The majority ethnic group, officially known as Kinh (người Kinh), accounts for over 85% of the population, while Vietnam's ethnic minority population is comprised of indigenous groups—largely the Khmer, Mong, and Muong who have historically settled in the mountainous regions.1

Our perspectives are drawn from the clinical experiences of multilingual, first- and second-generation Kinh-Vietnamese refugees and immigrants who assimilated in the Northeastern, Western, and Midwestern regions of the United States. We are early-career neuropsychologists currently practicing in outpatient clinics and inpatient units at academic medical centers and private practices in the aforementioned regions.

Geography

Vietnam is a country in Southeast Asia that borders China to the north, Laos to the northwest, and Cambodia to the southwest. Its maritime border includes the South China Sea along the eastern coastline and the Gulf of Thailand along the southwestern coastline. Vietnam is the 15th most populated country in the world, with over 97.3 million people.2

History

Vietnam has a long history of war and conflict, with records dating back to 111 BC when the Han Dynasty from China claimed the territory as part of the Chinese empire. This was the start of a long occupation lasting over 1,000 years.3 There were numerous revolts against Chinese imperialism, including two notable rebellions led by women: the Trung sisters’ rebellion (40–43 AD) and Lady Triệu’s revolt (c. 243–248 AD). The revolts were largely unsuccessful until the 10th century when Vietnam gained independence from China in 938 AD, ushering in a succession of dynastic rulers for 900 years, interrupted by periods of Chinese rule and Mongolian invasions. In 1858, Vietnam was colonized by France before regaining sovereignty in 1954 and establishing a demarcation line between North and South Vietnam along the 17th parallel.3 A civil war began in 1955 between the Communist North and anti-Communist South and ended in 1975 with the defeat of South Vietnam in 1975 and began a mass outmigration of Vietnamese refugees.3

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Immigration and Relocation

The first wave of Vietnamese refugees immigrated to the United States, Canada, Australia, China, and France at the end of the Vietnam War in 1975. The first wave of immigrants to the United States consisted of 125,000 refugees who were closely affiliated with the US/South Vietnamese government, members of the Vietnamese elite or middle class, and more educated professionals. From the late 1970s to early 1980s, a second wave of Vietnamese refugees comprised of former military officials and individuals from lower socioeconomic status (SES) backgrounds fled Vietnam due to political instability and economic hardship. These refugees were referred to as “boat people,” as many fled on unsafe and overcrowded fishing boats, and experiences such as pirate attacks, sexual assault, starvation, and death were common. Those who survived the journey were rescued and brought to refugee camps in Southeast Asian countries. The third significant wave of Vietnamese immigration to the United States occurred from the 1980s to 1990s and included refugees, political prisoners, and offspring of American servicemen and Vietnamese mothers. Currently, an estimated 2.1 million Vietnamese Americans reside in the United States, which represents the fourth-largest Asian American subgroup behind Chinese, Filipino, and Indian Americans. It has been estimated that Vietnamese immigration has exceeded 3.7 million residing over 100 countries with dense concentrations living in the United States, Eastern Europe, France, Australia, Canada, Germany, United Kingdom, and Northern Europe.

Trauma and Mental Health

Many Vietnamese people have survived traumas associated with the Vietnam War. Experiences of pre-migration trauma included the separation and/or loss of family and friends, combat, witnessing and/or surviving massacres, and forced relocation due to the destruction and loss of personal property. Refugees who escaped Vietnam on overcrowded and poorly constructed boats in rough waters were often targeted by pirates who killed, robbed, abducted, physically harmed, and/or raped their victims. Refugees continued to encounter hardships for years in overcrowded refugee camps under dangerous and unsanitary conditions that led to poor nutrition, starvation, and diseases. Resettlement also contributed to post-immigration stressors including acculturation challenges, economic hardship, limited English proficiency, intergenerational conflicts, and social stress.

Following the end of the Vietnam War, former military officers and government officials and individuals with ties to the former South Vietnam government were detained and imprisoned in Reeducation Camps (trại cải tạo). The reeducation process was both a means of revenge and a sophisticated technique of repression and indoctrination with accompanying hard physical labor, starvation, torture, confinement, and illnesses. In 1989, under the Released Reeducation Detainee Program (also known as Humanitarian Operation), more than 166,000 detainees and their family members arrived and resided in the United States. Due to exposure to war-related trauma and pre- and post-migration stressors, Vietnamese people are at increased risk for developing various psychiatric disorders including depression and posttraumatic stress disorder (PTSD). For example, the rates of clinical depression among Vietnamese Americans in community and primary care settings range from 30% to 50%.

Education and Socioeconomic Status

Vietnam’s educational system was historically influenced by Chinese and French cultures. The current educational system is similar to those of the American schools' system that includes
curriculum from preschool to high school. Trade, technical, and universities are available beyond high school, although the former are likely to be operated by the government. Over the past decades, Vietnam has made significant progress in basic educational systems and has achieved a literacy rate of 92.5%. Regarding educational attainment of the Vietnamese population, a 2005 survey estimated that 52% of Vietnamese born abroad earned the equivalent of a high school degree or less compared to only 21% of US-born Vietnamese. The gap pertaining to English proficiency becomes wider with 34% among Vietnamese born abroad compared to 88% of US-born Vietnamese.

Economically, Vietnam’s GDP per capita rank is 152nd out of 228 countries (the United States is ranked 15th). Because of rapid economic growth from increases in economic demand and strong manufacturing exports, Vietnam’s real GDP growth rate is ranked 21 in country comparison to the world. Among Vietnamese living in the United States, the poverty rate in 2015 for a US born is at 14.2% in comparison to a rate of 14.3% for a foreign born. Additionally, the median annual household income of a US born is $67,800 in comparison to $58,700 of a foreign born. Lower income levels among Vietnamese born abroad are likely associated with lower English proficiency and a lack of transferable skills upon immigrating to the United States. Specifically, Vietnamese refugees are often employed in manual labor and manufacturing jobs, small industries, or industry jobs with low paying wages (e.g., seamstresses in garment factories, dishwashers, and line cooks in restaurants).

Acculturation

English proficiency among immigrants has been used as a measure of acculturation in the United States. Among Vietnamese refugees, factors such as age, sex, and education in Vietnam significantly impact the level of acculturation in the United States. Vietnamese immigrants from the first wave who belonged to the upper/middle class and attained a higher level of education adopted English more readily and possessed transferable linguistic skills and abilities, which enabled them to assimilate into American society more readily compared to those from subsequent waves of immigration. Limited English proficiency coupled with acculturation challenges present major obstacles for Vietnamese Americans seeking medical and mental health services.

Language

Vietnamese is the official language of Vietnam, while English is increasingly favored as a second language, particularly in educational settings. Other common languages include French, Chinese, Khmer, as well as mountain-area languages such as Mon-Khmer and Malayo-Polynesian. The Vietnamese language has three major dialects classified by geographic regions: Miền Bắc (Northern Vietnam), Miền Trung (Central Vietnam), and Miền Nam (Southern Vietnam). The three dialects differ primarily in phonology, as well as vocabulary and grammar.

Values and Customs

Common religions in Vietnam include Buddhism, Catholicism, Taoism, Cao Dai, and Hoa Hao, although a majority of Vietnamese are non-religious. Awareness surrounding sexuality has increased in Vietnam in recent years, as demonstrated by the lifting of bans on same-sex
Vietnamese Americans

marriages in 2015, although there is currently no legal recognition of unions. As a patriarchal society, members of the lesbian, gay, bisexual, transgender, intersex, and asexual community can face discrimination and violence, and they do not yet receive protections under the law.

Health Status

The life expectancy at birth is 72.7 years for males and 78.1 years for females in Vietnam. Major infectious diseases include bacterial diarrhea, hepatitis A, typhoid fever, dengue fever, malaria, and Japanese encephalitis. The leading cause of death and disability in Vietnam in 2019 was stroke, followed by ischemic heart disease, diabetes, chronic obstructive pulmonary disease, lung cancer, road injuries, and cirrhosis.

Mental illness in Vietnam is both pervasive and highly stigmatized, afflicting approximately 20% of the population. Common disorders include depression, anxiety, schizophrenia, behavioral issues in youths/teens, as well as alcohol abuse, and drug addiction. However, there is a significant shortage of mental health professionals, particularly the nascent specialization in clinical psychology. As such, neuropsychological services are not yet readily available to Vietnam’s aging population.

Approaches to Neuropsychological Assessment

Among Vietnamese-speaking individuals, the neuropsychological assessment is impacted by various factors, as there is a lack of Vietnamese tests, normative data, and culturally/linguistically matched neuropsychologists. While neuropsychological evaluations are ideally completed with culturally/linguistically matched neuropsychologists, this is not always feasible, and thus, interpreters are used as part of the evaluation process. Given the distinct differences across the Vietnamese dialects, it is not only crucial that interpreters are well trained with medical and health-related terminology but also possess a command of the dialect that they are asked to interpret.

The interpretability of neuropsychological test results is limited by the lack of comprehensive normative data; as such, qualitative observations regarding test performance play a significant role in the evaluation process. The Cross-Cultural Neuropsychological Test Battery (CCNB) was designed with cultural and linguistic factors taken into consideration to evaluate dementia among five target groups, including Vietnamese Americans. The CCNB is the only comprehensive battery with normative data for Vietnamese Americans (N = 61), with age ranges between 62 and 87 (M = 71.5, SD = 5.8) and education between 0 and 18 years (M = 8.6, SD = 4.1). It was noted that ethnicity and education level were found to be significant contributing factors to performance on several tasks, as education accounted for, on average, 15% of the variance in test scores. This highlights the necessity of comprehensive normative data to include classifications of education level and age for the Vietnamese American population.

Vietnamese Americans are comprised of refugees, immigrants, first-generation (individuals who migrated in their younger years), second-, and third-generation US born individuals with unique experiences. Given the timeline of immigration, older Vietnamese Americans (typically first generation) with war-related traumas are approaching the age in which they are at increased risk of developing dementia. However, due to limited formal education, low language acculturation, reduced health literacy, and disparity in socioeconomic resources, older generations of Vietnamese Americans face greater disadvantages and hardships when obtaining health-related...
services. Factors such as cultural history, context of immigration, and the individual’s unique pre- and post-immigration experiences are important considerations when conducting a culturally informed neuropsychological evaluation.

Section II: Case Study — “Ginseng over Donepezil?”

Mrs. Nguyễn (pseudonym) is a 56-year-old, right-handed, married, Vietnamese woman with 16 years of formal education living in the United States. She was referred for a neuropsychological evaluation by her primary care physician due to concerns of memory decline. In addition to a review of her available medical records, information was gathered from a clinical interview with Mrs. Nguyễn, her husband, and her sister. Of note, Mrs. Nguyễn is bilingual and is proficient in both Vietnamese and English. A bilingual Vietnamese American examiner conducted this evaluation in English per her preference.

Cognitively, Mrs. Nguyễn and her family reported gradually progressive decline in her overall functioning over the past two years. Specifically, she reported increased difficulty recalling details of events, conversations, information discussed during her mother’s medical appointments, and names of familiar people. She has also misplaced objects. Her ability to focus has declined and she is easily distracted. She reported decreased multi-tasking skills and difficulty alternating between tasks, which represents a change. She is increasingly dependent upon her children with daily technology-related tasks due to difficulty understanding modern technology. Mrs. Nguyễn reported that she and her husband have recently implemented a morning routine to help organize and orient her after waking, as she has forgotten to complete important tasks during the day. He also purchased a whiteboard to assist her with tracking her family’s schedule (e.g., appointments, children’s extracurricular activities).

Functionally, Mrs. Nguyễn is independent in her basic activities of daily living (ADLs). In terms of her instrumental ADLs (IADLs), she organizes her medications with reminders from her husband; she denied missing doses. Her husband has historically managed the household finances; however, she manages her mother’s finances without difficulty. Mrs. Nguyễn purchases groceries, cleans, and prepares all meals for the family. She currently drives without difficulty and denied any recent accidents, tickets, or missed exits/turns. However, she has gotten lost and increasingly relied on global position systems when deviating from routine routes.

Physically, Mrs. Nguyễn reported a stable appetite and a life-long “sweet tooth,” such that she can eat a bucket of ice cream in one sitting. She has dinner with her family every night. She sleeps approximately 5–6 hours and wakes up rested. She wears glasses for distance vision and reading. She reported moderate hearing loss in her right ear at age 10 but denied the use of a hearing aid.

Emotionally, Mrs. Nguyễn reported moderate feelings of anxiety and sadness, particularly regarding her breast cancer history (diagnosed ~10 years prior). She feels as if she is a burden upon her immediate and extended family due to her cognitive decline. She reported relational strain with her husband and feels similar to a single parent who has had to take on the majority of the parental responsibilities. She takes escitalopram (10mg) for depression and reported always being “naturally sentimental, sensitive to information,” and easily moved to tears.

Medical History

Mrs. Nguyen’s medical history is significant for left breast cancer status post-chemotherapy in complete remission, hypertension, and hyperlipidemia. She denied any history of head injury or
seizures. Genetic testing revealed an APOE genotype of e3/e4. Her family history is significant for Parkinson's disease (father), diabetes mellitus (mother), and cerebrovascular accident (aunt). Recent neuroimaging results are as follows:

- FDG-PET of the brain revealed moderately increased amyloid uptake in the cortical cerebral gray matter involving the frontal, parietal, temporal, and occipital lobes with loss of gray–white matter differentiation in these areas. The scan was positive and reflected moderate to frequent amyloid neuritic plaques.
- PET scan revealed mild cerebral atrophy, most prominently involving the temporal and parietal lobes.
- A brain MRI revealed that temporal lobe volume is at the 22nd percentile and left temporal lobe volume is at the 18th percentile.

Social History

Mrs. Nguyễn was born in a city in the central highlands of south-central Vietnam. Her family relocated to the United States when she was 13 years of age. She is fluent in both English and Northern Vietnamese (bắc) dialect. She described herself as a good student. She graduated from a competitive university in California with a Bachelor of Science degree. She was employed as a researcher at a local university for 5–7 years before resigning ~12 years ago to care for her children. She was working part-time (3–4 hours/day) at her sister's dental office. She is married and has two teenage children. Mrs. Nguyễn is highly involved in the parent association at her children's schools.

Behavioral Observations

Mrs. Nguyễn presented to the clinic with her husband and sister, while a younger sister contributed to the clinical interview via telephone. She was appropriately groomed, comfortably dressed, and appeared her stated age. She was alert and oriented to person and situation; however, she was unable to recall the correct date. Gait was unremarkable and no fine motor difficulties were noted. Her speech was normal for volume, rate, tone, and prosody, while articulation was notable for a slight accent. Thought processes were linear and logical. She demonstrated good insight into her cognitive difficulties but was unable to accurately recall important dates (e.g., year of wedding, academic graduations, ages of her siblings). As such, her sister and husband corrected her when necessary. Mrs. Nguyễn appeared visibly distressed and tearful during the first half-hour of the appointment, as she worked to coordinate transportation services for her mother (who had a medical appointment on the same day) and children. Her husband and sister offered to assist with making arrangements after she expressed feeling overwhelmed and emotionally dysregulated. She ultimately regained her composure after reassurance from her family and the examiner and agreed to proceed with the evaluation. For the remainder of the evaluation, Mrs. Nguyễn's mood was euthymic with congruent affect. She denied suicidal and homicidal ideation. No evidence of sensory hallucination or delusional thoughts was observed.

During testing, Mrs. Nguyễn was alert and cooperative on all tasks. She reported feeling fatigued throughout the evaluation process and was provided breaks as needed. She exhibited adequate frustration tolerance during testing; however, she became discouraged on several
memory tasks and was concerned with perceived failure/poor performance. The results from the current evaluation appear to provide an accurate assessment of her current cognitive functioning.

Cultural Considerations

Multigenerational Household

Mrs. Nguyễn’s living arrangement consists of three generations, with her mother- and father-in-law (both in their early 80s) sharing one bedroom. Within the household, all spaces are shared and doors are typically open with the expectation that members can go in and out freely.

Gender Roles

Mrs. Nguyễn’s household is generally patriarchal in structure; her husband is expected to financially provide for the family while she is expected to care for and provide emotional support for her children and in-laws. Specifically, she is her mother’s translator and drives her to medical appointments. Mrs. Nguyễn prepares all meals for the entire household with some assistance from her mother. Meals are eaten together at a set time around the dinner table. During the interview, she endorsed feeling overwhelmed by her various familial responsibilities, which has significantly delayed her help-seeking. She often places her needs and health second to those of her family members’ and takes on a group-oriented rather than individualist view of self.

Perception of Cognitive Decline

During the interview, Mrs. Nguyễn’s husband and sisters reported that the family overlooked initial signs of her cognitive difficulties for several years, as they thought she was “overwhelmed with stress” (bị áp lực). Per her husband, Mrs. Nguyễn’s mother often attributed her memory lapses to “thinking too much that it makes her go crazy.” Mrs. Nguyễn’s family members were aware of the 2019 PET scan results indicating a neurodegenerative disease process but had limited understanding that Mrs. Nguyễn’s cognitive changes were related. They attributed the observed changes to stress, personality, and cultural factors. She reported that her husband and siblings typically “cover for her” when she has memory lapses or “finish her sentences” when she evidences word-finding difficulty.

Test Selection

The selection of appropriate neuropsychological test battery is essential for valid test interpretations when working with culturally diverse patients. For Mrs. Nguyễn, variables such as years residing in the United States, bilingualism, and acculturation were considered in selection of tests and normative comparison. Based on her social history (e.g., level of acculturation, education, and language proficiency), English language-based tests and Western norms were utilized. The following tests were administered (see Lezak et al., 33 for further description):

- Boston Naming Test
- Clinical Dementia Rating
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• Controlled Oral Word Association Test
• Functional Abilities Questionnaire Geriatric Depression Scale
• Hamilton Anxiety Inventory
• Hopkins Verbal Learning Test-Revised
• Mini-Mental State Exam
• Rey–Osterrieth Complex Figure Drawing Test
• Stroop Color Word Test
• Trail Making Test
• Wechsler Adult Intelligence Scale, 4th Edition (selected subtests)
• Wechsler Memory Scale, 4th Edition, (selected subtests)
• Wechsler Test of Adult Reading
• Wisconsin Card Sorting Task

Summary and Impression

The results from the current neuropsychological evaluation revealed intact auditory attention and visuospatial abilities. Multiple intradomain variations ranging from impaired to average were documented across areas of processing speed, language, and executive functioning. With regard to memory functioning, Mrs. Nguyễn demonstrated largely impaired learning and recall of both visual and verbal information in the context of poor performance across recognition memory trials. She endorsed significantly greater symptoms of depression and anxiety on self-report inventories in contrast to mild symptoms reported during the clinical interview in the presence of family members.

Mrs. Nguyễn is independent in her basic ADLs and most IADLs but requires multiple daily prompts from her husband to stay on schedule. Overall, the results of the evaluation reflected primary deficits in verbal and visual learning and memory, as well as impaired semantic language. Qualitatively, she evidenced difficulty recalling details of her personal history (e.g., year of wedding, academic graduations, ages of her siblings). The nature of her cognitive deficits likely represents a decline based on her high average premorbid estimate, educational attainment, occupational history, and information obtained from the clinical interview.

Altogether, her presentation is most consistent with a diagnosis of Mild Cognitive Impairment (i.e., Amnestic Mild Cognitive Impairment). The etiology is likely secondary to a neurodegenerative process based on the pattern of deficits and neuroimaging findings, which reflected moderate to frequent amyloid neuritic plaques and reduced temporal lobe volume and mild cerebral atrophy with predilection in the parietal and temporal lobes. It should be noted that the presence of mild mood-related symptoms and psychological stressors likely exacerbate Mrs. Nguyễn’s cognitive weaknesses but do not wholly account for the magnitude of deficits observed on testing.

Feedback Session and Follow-Up Care

During the feedback session, Mrs. Nguyễn’s husband and sisters were informed of her diagnosis, which was supported by the results of the neuropsychological evaluation, details of her genetic analysis, and neuroimaging results. They appeared impassive and matter-of-fact. In a later email, her sister informed the examiner that the family purposefully maintained composure to promote
interpersonal harmony and avoid causing alarm or discomfort. Mrs. Nguyễn and her family were provided with the following recommendations:

- **Sharing workload**: Given her cognitive decline, she would benefit from sharing familial responsibilities to reduce her workload. This would alleviate some of the stress and burden of being overworked and overwhelmed.

- **Psychiatry and mood support**: She was encouraged to consult with an ethnically/racially and/or language congruent mental health practitioner with experience in aging to assist her with developing appropriate coping strategies to address difficulties with cognition, mood, and stress. Family sessions may also be appropriate to assist with discussing concepts that are addressed in individual sessions.

- **Family education and support**: Mrs. Nguyễn and her family were provided information for community and national support groups that offer resources related to memory, mood, and aging. These caregiver resources will enable her family to understand the basis of her cognitive complaints and their neurological underpinnings (rather than attribute them to “worrying too much”) and to explore how they can assist her in daily functioning that minimizes stigma.

During a one-year follow-up phone call, Mrs. Nguyễn reported that her family continued to attribute her cognitive difficulties to depression rather than cognitive impairment. Her family members also attributed her memory loss to “taking too many Western medicines” that “made her mind hot” and her stress and frustration were interpreted as excess “heat.” She was not engaged in psychological services but rather made several dietary changes in an effort to maintain a healthier lifestyle. Her family continued to rely on her with responsibilities and maintained expectations of her to care for her in-laws and children. When she communicated the results of the evaluation with her mother and extended family, they questioned its relevance and did not understand why she sought “outside” help rather than consult with a trusted family physician or herbalist. After much discussion with the provider, Mrs. Nguyễn acknowledged the importance of returning for an 18-month re-evaluation.

### Section III: Lessons Learned

**Considerations for establishing rapport:**

- Vietnamese culture has a strong emphasis on respect based on age and/or status. Therefore, families may be reluctant to share “excessive” details out of respect for the clinician’s time and may not correct misconceptions. Ask families to correct interpreters/clinicians at the beginning of the evaluation (e.g., “Please correct us if we misunderstood you or said something incorrectly”).

- To prevent unintentional miscommunication that can negatively influence rapport, a common practice in Vietnamese culture is to “ask for forgiveness” at the beginning of the evaluation (e.g., “I apologize in advanced if I misspeak or do something that is insulting as I am not familiar with Vietnamese customs”).

- Start the session with a thorough review of privacy policies. Provide examples to establish trust (e.g., “If someone calls and asks for your information, I cannot acknowledge that I work with you without your written permission”).
• Non-verbal behaviors that may be welcoming to a Vietnamese patient includes standing up when greeting the patient, inviting the patient to sit first, making eye contact with families and not the interpreter when asking questions, and gesturing to individuals or distal objects with an open hand rather than pointing with the index finger.

• Vietnamese patients who are not familiar with healthcare systems may exhibit mistrust and suspicion about the motives of institutions (e.g., insurance and government programs). Clarifying the clinician’s goals and motivations may be necessary in these instances.

Considerations for the clinical interview:

• Clinicians should be aware of the patient’s family dynamics and identify key family members who play a role in healthcare decision-making. For example, there may be changes in family dynamics as parents age and the possibility of role reversals, with parents relying on their children to act as healthcare decision-makers.

• Vietnamese patients may be hesitant to disclose medical information due to stigma. In this context, the clinician interview with the patient and family members can occur together and then separately. Interviewing the group as a whole will highlight important family dynamics while interviewing individuals separately will bring to light important information that the patient or family members may be more reluctant to share in a group setting.

• Vietnamese people value the elderly and may be very complimentary toward elders who demonstrate aging ideals, such as aging gracefully in the context of beauty (đẹp lão), being insightful and logical (sáng suốt), having a keen and shrewd mind (minh mẫn), and having an alert/lucid mind (tinh táo). As such, they may be reluctant to endorsed cognitive deficits or decline to “save face” among their community. Therefore, tailoring the clinical interview to specific symptoms of deficits rather than general concepts of cognitive decline may be helpful in eliciting diagnostic information.

• Cultural beliefs surrounding illnesses may focus on a temperature imbalance, such as ingesting foods or medications that are overly “hot” or “cold.” Therefore, illnesses may be perceived as temporary and not worth discussing due to causal links to variables that can be adjusted (e.g., diet).

• Clinicians can reduce the stigma of illnesses by:
  • Acknowledging cultural beliefs, particularly regarding Western medicine, memory, aging, and mental health
  • Validating the family’s efforts and reassuring them that one would expect even the “best” of families would require specialist care
  • Encouraging the family to share in efforts to assist the patient

• Vietnamese families may not report the use of Eastern medicines and remedies without direct questioning. Specifically, reliance on alternative medicine (thuốc bác), such as steaming ginkgo biloba, sanshin root, ginseng, ginger, and other herbs to regain the mind-body balance is a common practice.

• Clinicians should query about medication adherence for all prescribed medications. For example, Vietnamese patients may exclusively rely on over-the-counter medications for medical complaints and/or replace prescribed medications with Eastern medicines as discussed above (e.g., reliance on ginseng over donepezil).
Considerations for testing and interpretation:

• While the selection of appropriate neuropsychological test norms is essential for interpretation and case conceptualization, comprehensive norms are not available for Vietnamese patients. Thus, tests with fewer language demands may be more appropriate. While not an exhaustive list, we have included tests in the Appendix section that have translations/norms for the Vietnamese population.

• All assessment data should be integrated and interpreted within the context of the patient’s cultural characteristics. For example, results of verbal tests with Western norms likely provide an underestimate of actual abilities if the patient is not proficient in English. In this case, the clinician must rely more heavily on consistencies in the patient’s overall presentation rather than focus on “deficits” on select tests.

• If test results are deemed to have poor validity, the clinician may need to emphasize functional abilities described by collateral sources in the interpretation of assessment data.

• Clinicians should clearly document all non-standardized assessment procedures, rationale for the modifications, as well as limitations of test interpretations in the neuropsychological report.

• It is important that clinicians are aware of how patients perceive the testing situation to maximize comfort. For example, a Vietnamese patient may be uncomfortable with the testing situation due to stereotype threat, poor rapport with the examiner, or anxiety related to performance.

• Provide reassurance to patients prior to testing that their results are private and will not be shared without their consent to reduce anxiety about “losing face.”

• Flexible test administration and modifications may be necessary. Vietnamese patients may not understand standardized testing procedures and may need examples or modeling to complete tasks. In addition, testing of limits may help ameliorate issues with cultural/language incongruence.

Considerations for feedback and recommendations:

• Families may be agreeable and reluctant to voice their questions, doubts, or confusion. Remind families that they should openly communicate their disagreement and/or concerns.

• Discussion of results and recommendations should use definitive terminology where possible. Using ambiguous terms such as “possibly” or “maybe” can lead to assumptions or dismissing all data.

• Use tangible, short, and personalized action plans. Given language and cultural barriers, families and individuals are easily overwhelmed by paragraphs of detailed recommendations with medical jargon. Present the recommendations as a short list of “to do’s” that involves the individual’s family.

• Provide culturally congruent recommendations, such as Tai Chi/qigong training for physical activity and meditation for stress management.

• Patients may be reluctant to join support groups due to stigmatization and “losing face.” Discuss alternative solutions with the family, such as support from individuals in the “inner circle.”
Vietnamese families may perceive placement in retirement communities or nursing homes as a lack of filial piety and loss of love. This can cause significant distress and tension between family members as well as shame and guilt in children.

It may be worthwhile to discuss the patient’s history of reliance on alternative treatments, such as coining, cupping, and use of Eastern medicine. Furthermore, patients should be encouraged to communicate the use of Eastern medications with their prescribing physicians to avoid potential harmful effects.

Glossary

bị áp lực. Overwhelmed/overburdened with unavoidable stressors.
dep lão. Aging gracefully in the context of beauty.
giòng bắc. Vietnamese dialect.
Miền Nam. Southern Vietnam.
minh mẫn. Having a keen and shrewd mind.
người Kinh. The majority ethnic group.
sáng suốt. Being insightful and logical.
thuộc bác. Alternative/herbal medicine, such as ginkgo biloba, sanshin root, ginseng.
tình táo. Having an alert/lucid mind.
trại cải tạo. Re-education camps.

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