

# UTILITY OF THE PSYCHIATRIC SCREEN AMONG THE NAVAJO OF CHINLE: A FOURTH-YEAR CLERKSHIP EXPERIENCE

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*Abstract: This study presents a trial in which the General Health Questionnaire (GHQ) was introduced among general medicine clinic patients on a Navajo Indian reservation in Chinle, Arizona, to test its utility in enhancing recognition of significant psychiatric problems. It was found useful in alerting physicians to suicidal patients, and in identifying risk factors such as household size and number of children for symptoms of anxiety and depression. The few problems encountered in administration of the screening tool could easily be overcome.*

As a fourth-year medical student, one of the authors (H.G.) completed a five-week family and community medicine rotation in Chinle, Arizona. While there, he examined the structure of health care delivery, with specific reference to mental health care needs of those not presenting themselves to psychiatric services, but instead seeing physicians for physical complaints.

The Navajo of Chinle, like many American Indians, live in an environment with high stressors (at least in Anglo dynamics) and few resources to treat mental illness. Some of these factors include the high prevalence of chronic illness, a financially impoverished community, and a high rate of unemployment (U.S. Bureau of the Census, 1980; U.S. Department of Health and Human Services, 1984; U.S. Office of Health Resources Opportunity, 1977). The birth rate in some parts of the Navajo reservation is more than double the national average (30.5 vs. 15.9 per 1,000) (Brod & McQuiston, 1983; Jepsen, Strauss & Harris, 1977; U.S. Department of Health and Human Services, 1984).

A relationship between stress and symptoms of mental illness is suggested by evidence that alcohol abuse is a major factor in four out of 10 of the leading causes of death among American Indians (May, 1983). Only recently have birthrates among the Navajo improved from a disastrously high morbidity and mortality. Diabetes, heart disease, stroke, and glaucoma are all more prevalent in American Indians as compared to age-matched white Americans (U.S. Department of Health and Human Services, 1984).

The etiology, recognition, and treatment of mental disorders within individual American Indian and Alaska Native tribes, and even further subgroups of people, are not well understood. Formal Indian Health Service (IHS) mental health clinics were established in 1965. Yet to this

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day, these services appear to have been unable to significantly reduce mental disorders among their constituents.

Cultural diversity suggests that mental health problems will present differently in divergent groups of people. In the case of the Navajo, for example, depression may present with symptoms that are inconsistent with white middle-class expectations. When attempting to meet the mental health needs of any group known to be culturally "different," it makes sense to begin by attempting to validate specific diagnostic assumptions and the instruments used to identify them. A standard line of inquiry (e.g., "Have you been feeling depressed lately?") used by a typically trained mental health professional or a nonpsychiatric physician could result in overlooking the mental health needs of many.

### Summary of Previous Studies

In 1974, an entire journal (*Psychiatric Annals*, 1974) was devoted to American Indian mental health issues. Its descriptive and anecdotal passages directly challenged racist stereotypes (such as the drunk, uneducated, heathen American Indian). Manson, Shore, Bloom, Keepers, and Neligh (1987) used diagnostic interviews, such as the Schedule for Affective Disorders and Schizophrenia Lifetime Version (SADS-L) (Endicott & Spitzer, 1978) and portions of the Diagnostic Interview Schedule (DIS) (Robins, Helzer, Croughan, et al., 1981), to make diagnoses of mental illness among the Hopis as well as among other small communities of American Indians. Manson and his colleagues compared the questionnaires with psychiatric interviews, which were conducted only after extensive ethnographic observation and questioning of illness within that community.

The researchers concluded that self-rating scales can accurately assess mental health status among American Indians provided that they are modified to reflect basic cultural heritage and experiences (e.g., not using words like "blue" or "down in the dumps" for depression) (Manson, Walker, & Kivlahan, 1987).

Forms of mental illness were also recognized as clearly indigenous; some illnesses were related in symptomatology, but none clearly fit DSM-III diagnostic criteria. Often this was found to be due to linguistic and semantic differences, such as the DSM-III grouping of words like "sinfulness", "guilt", and "shame" (which have very different connotation to the Hopi). Another instance was the DSM-III requirement for the diagnosis of depression of a two week period of dysphoria or lack of interest, as well as many additional vegetative and cognitive symptoms. According to these studies, the Hopis suffered from two distinct illnesses, one of many depressive symptoms without sustained dysphoria, and another lasting for longer than two weeks but associated with only two symptoms of depression (again, according to DSM-III). Symptoms may be shared cross-culturally, but the criteria used in building our definitions of specific mental illnesses need to be culturally validated.

### The Current Study

This paper reports the results of the introduction of an early psychiatric screen in the general medicine IHS clinics in Chinle during the fall of 1987. Such screens have been found useful in numerous studies among Anglo populations (Hoepfer, Nyuez, Kessler, Burke, & Pierce, 1984; Rand, Badger, & Coggins, 1988; Shapiro et al., 1987). If this protocol were found useful to both patient and physician in discussing mental health problems and their treatment a new tool would be available for evaluation of psychiatric needs. Such a tool must be relevant, i.e., a patient's response to specific questions should provide an indication of mental impairment. Furthermore, this method must be practical, given the time limitations of the doctor and other personnel. In addition, the results of the screen must be quickly available, since it would be difficult to bring the patient back at a later time for evaluation.

The authors hoped to progress beyond the summary recognition that mental illness exists in American Indian communities. Specifically, in the Navajo town of Chinle, this reality has long been recognized by virtue of the existence of the mental health clinic and substance abuse center; neither facility, however, is heavily utilized. This fact is supported nationally, where outpatient visits by American Indians to mental health services constitute only 2% of total visits to IHS outpatient clinics (Rhoades et al., 1980). Although the observation is anecdotal, it did seem that in Chinle, at least, Navajos are unlikely to walk through the doors of mental health centers on their own. This suggests that, secondary to the earlier statistics cited, there are many people whose mental health needs are unrecognized, untreated, or treated outside the IHS.

### Methods

The General Health Questionnaire (GHQ) was used as the psychiatric screening tool (Goldberg, 1978). The GHQ has correlated well with psychiatric disorders among many Anglo communities (Hoepfer et al., 1984; Rand et al., 1988; Shapiro et al., 1987); however its validity has not been tested among any American Indian group. To reduce possible misinterpretation brought about by cultural differences, we asked two Navajo mental health workers to evaluate language usage; they saw no problems with respect to the limited goals of the project. In past studies with the GHQ, a score of less than five has been considered of "no probable significance psychiatrically"; a score of five through nine has identified a "probably case"; and a score above nine has indicated "likely significant psychiatric morbidity".

The GHQ was completed by patients in the waiting room, usually in less than 10 minutes. The acknowledged limitation of this method were that only those who could read and write English could respond (at Chinle, this was as low as 50% of patients seen a day). Thus many patients,

especially older ones were not included in the study. The GHQ was scored by a nurse of the physician prior to patient contact, and was put into the patient's chart to decide whether or not the physicians used the score and clinical judgment to discuss the indications of symptoms and the benefits of mental health assistance with the patient.

### Results

All respondents (N=89) were residents of the Navajo reservation. They were young (mean=32; s.d.=13), predominantly female (69.9%), and living in large households (mean=5.1, s.d.=2.0). The average number of children of the respondents was 3.2 (s.d.=2.4). Sixty percent of this English-speaking subgroup had graduated from high school, higher than the average among all American Indians nationally. Marital status (which did not provide for those living together without marriage) showed two-thirds of the respondents to be married. The average years of education was 10.9 (s.d.=3.5) and 52% of the respondents were unemployed.

**Table 1**  
Demographic Characteristics of Study Population (N=89)

Variable	N	Percentage
<b><u>Marital Status</u></b>		
Married	61	68.5
Divorced	3	3.4
Separated	5	5.6
Never married	15	16.9
Widowed	5	5.6
<b><u>Church Affiliation</u></b>		
Native American Church	20	22.5
Protestant	13	14.6
Catholic	16	18.0
Mormon	7	7.9
Other	3	3.4
None	30	33.7
Tribal ceremony participant	60	67.4
Tribal or clan membership	61	68.5
<b><u>Employment</u></b>		
Teacher	10	11.2
Aide (teacher's or nurse's)	2	2.3
Skilled workman	4	4.5
Professional (e.g. allied health)	8	9.0
Other (e.g., farmer shepherd)	19	21.3
Unemployed	46	51.7

Table 1  
Demographic Characteristics of Study Population (N=89)  
(Continued)

Variable	N	Percentage
<b>Education</b>		
Less than high school	36	59.0
Completed high school	28	31.5
Partial college	19	31.1
Four or more years college	6	9.9
<b>With Chronic Diseases</b>		
None	73	82.0
Hypertension	11	12.4
Diabetes	4	4.5
Other	1	1.1

On the GHQ, 36% scored five or above (a probable case) and 19% scored 10 or above, indicating high levels of distress. There was a borderline significant difference between the frequency of men and of women who scored above five (21% versus 44%,  $p=.06$ ). Among men, those who were unemployed had lower scores than those who were employed (7% versus 39% for scores of 5+,  $p=.10$ ). Among women, on the other hand, scores revealed a significant and opposite trend: GHQ scores above five were obtained more often by women who were unemployed (61% versus 27%,  $p=.01$ ). Men and women also answered specific GHQ questions significantly differently. In addition, there was a significant correlation between total GHQ score and number of children in the home ( $r=.23$ ,  $p=.02$ ).

Table 2  
Responses to Selected GHQ Items with a Significant  $X^2$   
Difference by Sex

Item	% Men	% Women	P
3. Been feeling run down and out of sorts?	3.7	36.1	.003
5. Been getting any pains in your head?	14.3	37.7	.050
6. Been getting a feeling of tightness or pressure in your head?	10.7	29.5	.090
10. Felt constantly under strain?	3.6	26.2	.020
19. Felt that you are playing a useful part in things?	10.7	29.5	.090

With regard to specific subsections (i.e., somatic, anxiety, psychosocial, and depression) of the GHQ, the most positive responses were within GHQ part B, the anxiety subsection. The lowest positive responses were in GHQ part D, the depression subsection. There was a significant positive correlation between number of children in the home and scores on GHQ part B ( $r=.20$ ,  $p=.03$ ) and negative correlation between age and scores on GHQ part D ( $r=-.16$ ,  $p=.06$ ). Overall, those in larger households were more likely to respond positively to more GHQ questions ( $r=.15$ ,  $p=.08$ ). The score on the GHQ was not related to specific church affiliation, participation in tribal ceremonies or holding tribal membership, education level, type of employment, languages spoken, or chronic diseases suffered.

Table 3  
Average Subsection Scores on the GHQ and Percentage Scoring Above 5

GHQ Section	Mean	% scored 5
A - Somatic	1.4	8.8
B - Anxiety	1.4	14.1
C - Psychosocial	1.3	9.8
D - Depression	0.6	4.3

Note: Each subsection has a maximum score of 7.

#### Discussion

This trial was implemented as a preliminary test of the usefulness of a screening tool to alert primary care physicians to the mental health problems of the Navajo of Chinle. There was no attempt in this preliminary study to test the criterion validity of GHQ scores with DSM-III diagnoses. Evaluation of patients who present with medical complaints for psychiatric symptoms appears possible, even (as in this case) by an interviewer with only limited cultural knowledge of the people. Our conclusions were similar to results found in previous trials with the GHQ in Anglo settings, where 30 to 50% of those responding to the GHQ scored five or above (Ficken, Milo, Badger, Leeper, Anderson, & Jones, 1984; Hoeper et al., 1984; Rand et al., 1988; Shapiro et al., 1987). Thus, the Chinle Navajo who responded to the GHQ revealed symptoms at a rate near to those of Anglo communities. The Navajo seem willing to record these feelings on paper, as have other U.S. population groups (Ficken et al., 1984).

The routine in the waiting room, where the GHQ was handed to patients, worked well. The nurses directed all those with GHQs to see the physician for their medical complaints. The physician was then able to

address mental health issues in a general way, and to educate the patients about the mental health assistance available to them.

Another procedural note of interest is that patients would only take the form when it was handed to them directly by the clerk. If the clerk was busy at the time a person signed in, patients would not pick up the GHQ from the counter. On several occasions, people would cautiously stand flipping through the questionnaire while pencils sat to the side, untouched. According to the clerk, when she directly asked those who could read and write to fill out the questionnaire, however, no one refused; several forms were returned only partially completed. How this behavior might vary in other settings is unknown.

Use of the GHQ does not ensure that all patients who need mental health services will get them. Any patient may choose to terminate a discussion of mental health issues or ignore any suggestions for help. At the least, however, with this approach mental health concerns have been raised. Within this protocol, the notation of the GHQ in the chart could serve as a reminder to the physician of these needs in future meetings.

Additionally, the GHQ can be broken down to reveal specific symptoms that indicate a person may be depressed or suicidal, conclusions that travel beyond DSM-III diagnosis or statistical significance. People indicating that they feel "the possibility that you might do away with yourself" (Q#25) deserve attention regardless of total GHQ score. A Navajo mental health professional cautioned that directly mentioning death was taboo to many traditional Navajos. In her words, "To think of death invites it." Thus, if anyone answered positively to such an inquiry, there would be all the more reason to provide information and a caring ear. It seems reasonable that any Navajo willing to respond to such questions, and in some sense "invite it" (death), might be indirectly requesting attention and assistance. In this study, those responding "definitely so" to suicidal thoughts were urged to seek help, and an actual referral was offered. Of the four who responded to such questions, three allowed the physician to make appointments for them with the mental health clinic.

Some may question the ethics of bringing up ideas such as suicide without assurance that the patient will follow up with help from the IHS. Yet it is known that discussing mental health problems does not provide the impetus for dangerous action. And there is the possibility that one can begin down a path of healthier thought and action, whether it be through consultation with the IHS or perhaps a Medicine Man or Woman; even just answering the GHQ may begin a process of self-reflection sufficient to bring up such feelings on the next visit to the doctor.

The significant difference between the responses of men and women, especially in questions indicating somatic complaints, parallels earlier studies with the GHQ where women more frequently respond positively to somatic complaints (Rand et al., 1988). However, the inverse relationships between gender and work status and GHQ score (i.e., among women, the unemployed scored higher on the GHQ depression scale, while

while among men, the employed scored higher) was an interesting finding. Perhaps these data reflect differences in the roles of men and women on the reservation, or perhaps women experience the domestic stresses of economic deprivation more than men. While it is difficult to speculate on what forces shape this unexpected result, it is likely that job roles also make a substantial contribution to the mental well-being of Indians, as they do to other cultural groups.

Questionnaires such as the GHQ may be helpful in assessing Navajos' mental health status. They could alert physicians to their patients' suicidal thoughts. They could also highlight certain risk factors, such as household size and certain somatic complaints among women, to a patient's possible need for mental health services. Attention to these problems have tantamount implications for the Navajos' well-being. The grim statistics of alcoholism, suicide, and homicide tell resoundingly that Anglos just being there with mental health services offered is not enough, or perhaps even bad if we continue to be unsure of how the Navajo culture affects our interpretation of psychiatric problems. To aid these people in solving problems of mental distress, we need first be able to recognize what their needs are, be willing to implement such systems of recognition throughout their health care program, and learn how to treat their disorders. We know little about how to treat mental disorders in Anglo primary care settings, whether the same treatments, as used by psychiatrists in psychiatric settings, work on primary care patients, Anglo or American Indian.

### Summary

The trial which has been reported here suggests that a screening tool like the GHQ may be useful in bringing symptoms of mental health problems to the attention of a primary care physician working in a non-psychiatric setting. The few problems in administration of the screen could easily be overcome, and perhaps the medical centers would deem this method important enough to provide oral translators for those unable to respond to the questionnaire on their own. Ultimately, various treatment modalities could be tested for effectiveness in ways which Navajos find comfortable and reassuring.

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