

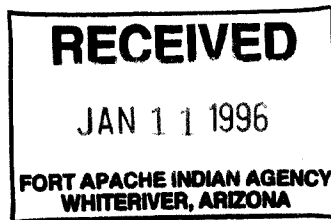
**RESOLUTION OF THE
WHITE MOUNTAIN APACHE TRIBE OF THE
FORT APACHE INDIAN RESERVATION**

- WHEREAS,** Dr. Robert Moffat, Sr. Resident in Internal Medicine, University of Arizona, and Dr. James M. Galloway, Director, Southwestern Native American Cardiology Program, Indian Health Services, and Assistant Professor of Clinical Medicine at the University of Arizona, in coordination with the Indian Health Service, Whiteriver Service Unit, have submitted a proposal to the Tribal Council of the White Mountain Apache Tribe to study an apparent increase in ischemic cardiovascular disease in White Mountain Apache Tribal Members; and
- WHEREAS,** a copy of the proposal, dated October 19, 1995, is attached to this Resolution and incorporated by reference herein; and
- WHEREAS,** the Tribal Council is in support of any medical studies which would improve the health and well being of tribal members, but is also sensitive to issues pertaining to medical ethics involving human subjects, their right to privacy and informed consent, and the manner in which the medical profession relates to persons who might be subjected to medical investigations and study; and
- WHEREAS,** the Tribal Council is advised that the study prepared, if approved by the Tribal Council, will be submitted to the American Heart Association for possible funding and that, if funded, the study could provide important information regarding the incidents of cardiovascular disease among tribal members and its relationship to risk factors; and
- WHEREAS,** the Tribal Council concludes that the White Mountain Apache Heart Study, as proposed, should be approved on the condition that the Tribal Chairman negotiate medical ethics, informed consent and privacy issues for the protection of tribal members participating in the study; and
- WHEREAS,** in order to protect the right of privacy and to insure informed consent of tribal members participating in this study, the Tribal Council shall require that the attached checklist, incorporated by reference herein, be discussed between the office of the Tribal Chairman and proponents of the cardiac study.

BE IT RESOLVED by the Tribal Council of the White Mountain Apache Tribe that it hereby approves the White Mountain Apache Heart Study as proposed in the October 19, 1995 outline, attached to this Resolution and incorporated by reference herein, subject to agreement on the ethics issues and conditions outlined herein.

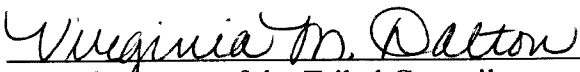
BE IT FURTHER RESOLVED by the Tribal Council that approval to conduct the Heart Study is conditioned upon the Tribal Chairman's office negotiating privacy, publication, informed consent and medical ethic issues for the protection of tribal member participants as outlined in the attached checklist, with Drs. Robert Moffat and Galloway, and the Indian Health Service, Whiteriver Service Unit.

The foregoing resolution was on December 6, 1995 duly adopted by a vote of ten for and zero against by the Tribal Council of the White Mountain Apache Tribe, pursuant to authority vested in it by Article IV, Section 1 (a), (b), (j), (q), (s), (t) and (u) of the Constitution of the Tribe, ratified by the Tribe September 30, 1993, and approved by the Secretary of the Interior on November 12, 1993, pursuant to Section 16 of the Act of June 18, 1934 (48 Stat. 984).





Chairman of the Tribal Council



Secretary of the Tribal Council

White Mountain Apache Heart Study

October 19, 1995

Background:

Cardiovascular disease is the leading cause of death for Native Americans, including White Mountain Apache tribal members. While in the past, the reported incidence and prevalence of ischemic heart disease has been considered extremely low, the incidence is clearly increasing dramatically in many tribes across the United States. As a result, there has been a significant increase in the number of patients undergoing cardiac catheterization, coronary artery bypass surgery and other interventional procedures, such as angioplasty. This increase has been clinically observed in the care of the White Mountain Apache tribal members as well and appears to be resulting in increased mortality and a decreased quality of life with significant impact on both the tribal members involved and their families.

The reason for this apparent increase in ischemic cardiovascular disease has not been defined, but appears to be in part due to a change in the level of exercise, diet and weight over the past several decades. This appears to be associated with an increased prevalence of hypertension, diabetes mellitus and abnormalities of blood lipid composition and concentration.

In an effort to obtain additional funding for targeted preventative activities, we must first document this increase in ischemic cardiovascular disease. In that spirit, we propose the White Mountain Apache Heart Study. As described above, this study will primarily consist of chart reviews, as well as ischemic cardiovascular disease risk factor

analysis in patients referred for evaluation for this problem to Tucson (which may consist of drawing an additional 10 to 20 cc's of blood one time while hospitalized) and, a non-invasive evaluation of 200 to 300 volunteers to include a history, physical examination, ECG and routine blood work (consisting of an assessment for the presence or absence of diabetes, renal failure and fat and cholesterol (lipid) abnormalities). It should be noted that all volunteer patient assessments, including blood level evaluations, are simply a routine screening for presence of cardiovascular disease and its risk factors. This data will clearly be of benefit to the individuals involved and the results of this data will be shared, with the individuals themselves as well as the tribal health board, as desired, on a regular basis.

I do believe this baseline data is vitally important in an attempt to document the clinical impression of a significant increase in ischemic cardiovascular disease among the White Mountain Apache Tribal members so that prevention activities, which have the utmost priority, can be initiated.

PROPOSAL:

As described above, we propose a one year long study to evaluate the incidence and prevalence of ischemic cardiovascular disease among White Mountain Apache Tribal members consisting of a chart review which will evaluate:

I. Cardiovascular Morbidity

- A. The incidence of acute myocardial infarction, unstable angina and cardiovascular interventions among tribal members, referred from the Whiteriver PHS Hospital.
- B. The incidence of cerebral vascular accidents and peripheral vascular disease in patients seen at the Whiteriver PHS Hospital.
- C. The relationship of routine risk factors to these cardiovascular diseases will be assessed from the chart as well. These routine risk factors will include diabetes mellitus, hypertension, high fat and cholesterol levels, tobacco use and family history. We will also assess for the presence or absence of renal insufficiency, proteinuria, retinopathy and the presence or absence of a abnormal baseline ECG.

II. Cardiovascular Mortality Related to Acute Myocardial Infarction

- A. We will assess the mortality from an acute myocardial infarction and compare this rate to the general population in an effort to reveal opportunities to improve the care of acute myocardial infarction patients.

III. Cardiovascular Caseload and Clinical Demand

- A. We will review, by IHS computer registries as well as direct chart reviews, the frequency of coronary artery disease as listed on

discharge diagnosis and outpatient evaluations in the patients seen both as inpatients and outpatients at the Whiteriver PHS Hospital.

IV. Cardiovascular Prevalence

A. Finally, in an attempt to assess the overall prevalence of ischemic cardio-vascular disease, a small group of volunteer tribal members who would like to be assessed for the presence or absence of ischemic cardio-vascular as well as its risk factors including hypertension, diabetes mellitus and cholesterol abnormalities will have histories, physical examinations, ECG and basic routine lab work performed consistent with standard clinical management. There will be no experimentation nor unusual studies/invasive procedures/unusual clinical care provided to these individuals. The results of these studies will be discussed with the individuals involved and referrals for risk factor reduction or additional clinical care based on the findings of these results will be performed.

V. Risk Factor Analysis of Individuals Referred for Cardiovascular Examination

A. When patients are referred to the Southwest Native American Cardiology Program for cardiovascular evaluation, during routine blood draws, if agreeable with the individual, a small amount of additional blood (generally, 10 to 20 cc's) will be obtained to look for abnormalities in the cholesterol and fat levels in composition

in the blood as well as its relationship to insulin levels. This will generally be a one time blood draw of a fasting sample while they are at the hospital. Again, results will be shared with the individuals obtained and their clinical management could be significantly improved based on the knowledge of these factors.

VI. Reporting

- A. As this data is obtained, individuals involved will obtain information regarding their individual results as well as appropriate referrals for additional standard clinical care. In addition, we will report to the tribal health board or tribal council, once every six months (or more often if desired) the initial results of our studies. In addition, the Whiteriver PHS Hospital Executive Board and physician staff will be informed of these results in these time periods as well.

Conclusion:

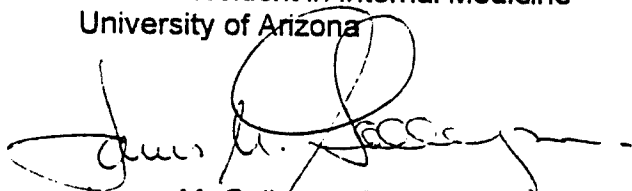
This study is being submitted to the American Heart Association for possible funding. If approved by the White Mountain Apache Tribe and funded by the American Heart Association, this study will provide important information regarding the incidence of cardiovascular disease among tribal members and its relationship to risk factors.

This information is vital to direct preventive care in an attempt to stem a clinically apparent rising tide of cardiovascular disease. Your consideration of this proposal will be greatly appreciated.

Sincerely,



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University of Arizona



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