Older African-Americans with osteoarthritis of the knee preferred to avoid total knee replacement surgery

Figaro MK, Russo PW, Allegrante JP. Preferences for arthritis care among urban African Americans: "I don't want to be cut." *Health Psychol* 2004;23:324-9.

Q What are the preferences and expectations of older urban African-Americans regarding total knee replacement (TKR) for osteoarthritis (OA) of the knee?

DESIGN

Qualitative study based on the theory of reasoned action as a model of behaviour.

SETTING

Communities in northern Manhattan, New York, USA.

PATIENTS

94 African-Americans >50 years of age (mean age 71 y, 84% women) with medical insurance, who had pain or stiffness in one or both knees that made walking difficult or slow during the previous 6 months, and who lived or attended church or a senior centre in Harlem. 13% of patients had had TKR.

METHODS

Data were collected during 45–75 minute structured face to face or telephone interviews that included both closed and open ended questions. Responses to open ended questions were recorded and transcribed verbatim. Major themes were developed through a process of categorisation.

MAIN FINDINGS

Preference for natural remedies. 36% of patients thought that OA was caused by cold or dampness, either to the joint or from the environment. They tended to think that OA was a natural, irremediable, inevitable deterioration and a sign of ageing. A strong trend toward an external locus of control of their illness was suggested: "I do not claim arthritis. God has not told me I have it. You have to claim it to have it." Most respondents believed that their bodies should remain intact and that the body would give information regarding any need for treatment. They also stated that their bodies were not ready for surgery. Patients also spoke of believing in home remedies for conditions such as OA, and some identified specific natural remedies they used, including keeping the knees warm, green alcohol, sliced potatoes, liniment, kerosene (paraffin), and various herbal creams and rubbing lotions.

Negative expectations of TKR. 52% of patients perceived that surgery was ineffective either for themselves or others. Common reasons included feeling that surgery was "hard to accept," could cause more problems, "doesn't last," and was a method of "last resort." Many noted that competence of the surgeon was the most important factor affecting success. Those with a positive view of surgery tended to view it as a technology used only in extreme situations. Patients also stated that general health, a positive attitude, weight, and cooperation of others in the household influenced the effectiveness of surgery. Sources of information included family members, friends from church, and the attending physician.

Beliefs in God's control. Patients objected to questions that asked them to choose situations that might increase their risk of death, stating that God controls the length of their lives. However, they did not cite belief in God's control with regard to outcome of surgery. Patient or physician factors were cited more often as reasons for complications or unsuccessful surgical outcomes.

Preferences for continuing their current state. Prominent fears expressed included "being cut," death, hospitals, doctors, becoming "crippled" in nursing homes, pain, and the unknown. Patients preferred to continue in their current, known state: "I know what I have, I don't know what I am going to get."

For correspondence: Dr M K Figaro, Vanderbilt University Medical Center, Nashville, TN, USA. kathleen.figaro@mcmail.vanderbilt.edu

Source of funding: not stated.

Relationships with specialists. The doctor-patient relationship was important, and patients who said that surgery was a last resort knew this because their physicians so rarely recommended it. Patients expressed distrust of specialists who recommended surgery. For some, negative experiences with specialists increased wariness and reluctance to have TKR. However, many knew that they would have to consult with a specialist before receiving TKR.

Fear of surgery or death. Patients stated that economic status was the likely reason that TKR was less common in African-Americans with arthritis. However, underlying their statements were fear and distrust of the medical system and fear of bad surgical outcomes: "That is the reason I didn't have surgery; I was afraid I'd die."

CONCLUSIONS

Older urban African-Americans with osteoarthritis of the knee preferred to continue in their current state, with use of natural remedies supported by beliefs in God's control.

Commentary

In the study by Figaro *et al*, the authors attempt to understand why African-Americans are 2–3 times less likely than whites to have TKRs despite the higher prevalence of OA in African-Americans. The findings are important in understanding how decision making about treatment options is influenced by a process of reasoned action; that is, healthcare information is processed through an individual's unique health belief system that is entrenched in cultural, experiential, and social factors. Figaro *et al* found that African-Americans relied on non-surgical (natural) remedies and the power of God rather than on surgery for OA.

The ethnic disparity in the use of surgery for OA described by Figaro *et al* is supported by other studies. Ibrahim *et al* assessed the willingness of African-American and white patients to consider joint replacement and found that white patients were more willing to consider surgery if it was needed and recommended.¹ Ang *et al* found no ethnic differences in perceptions of pain and functional limitation between African-American and white patients with a similar severity of OA.² 2 additional studies explored ethnic differences in surgical options for conditions other than OA and found that African-Americans with cardiovascular disease had fewer cardiac revascularisations than whites.^{3,4}

The findings of Figaro *et al* are limited by purposive and convenience sampling of urban African-Americans recruited directly from churches or senior centres in a single area. It is important to remember, however, that purposive sampling in a qualitative study such as this provides for theoretical generalisation of findings. Other methods relying on random sampling might provide wider generalisability.

The key theme identified by Figaro *et al*, "I don't want to be cut," signifies a cultural belief in body integrity and acceptance of degenerative joint change as part of ageing. The findings of this study will help nurses to understand the cultural frames of reference and related belief systems of patients that are integral to the provision of effective health education. Future work should build on current knowledge about ethnic differences and explore if culturally sensitive education can influence the attitudes and preferences of African-Americans about treatment options for OA and other medical conditions.

Faith J Forster, RN, MSN, APRN, BC
St Paul's Hospital, Providence Healthcare
Vancouver, British Columbia, Canada

1 Ibrahim SA, Siminoff LA, Burant CJ, *et al*. *Arthritis Rheum* 2002;46:2429–35.

2 Ang DC, Ibrahim SA, Burant CJ, *et al*. *J Rheumatol* 2003;30:1305–10.

3 Ibrahim SA, Whittle J, Bean-Mayberry B, *et al*. *Am J Public Health* 2003;93:1689–93.

4 Celia B. *Prog Cardiovasc Nurs* 2002;17:42–6.