Letter to Editor

Establishment of an Anti-Aging Health Screening Service in an Obstetrics and Gynecology Department of a Public Hospital

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Abstract

Purpose: We recently opened an Anti-Aging health screening clinic for women as out-of-pocket health care in an obstetrics and gynecology department of a public hospital. To help determine effective ways of establishing such services in rural areas, here we review the difficulties we encountered before opening and the solutions developed, as well as the characteristics of the women who visited for screening.

Methods: Information on the opening of the clinic was disseminated through the local health department, the local medical association, television stations, newspapers, and newsletters. We examined data obtained from 34 women who visited our Anti-Aging health screening clinic between January 2012 and January 2013. Through interviews, questionnaires, and health screening tests (with the use of an external diagnostic support system), we evaluated the following: how they heard about the clinic, reasons for their visit, age distribution, existing illness, functional age in terms of muscular, vascular, hormonal, bone, and neurological performance, and the presence of disease detected during screening.

Results: More than half of the visitors heard about the clinic via television, newspapers, or newsletters. Reasons for their visit were divided broadly into “health concerns” (concerned group) and “interest in health” (interested group), with a slightly higher number of patients with health concerns in each age group. Patients were distributed across all age groups, from their 30s to 80s. Existing lifestyle disease was common among patients aged over 50 and many patients in their 30s had premature menopause. In addition, osteoporosis was detected frequently during screening in patients aged over 60.

Discussion: For public hospitals, problems associated with the opening of a new clinic are the budget and diagnostic system. However, these problems can be addressed by using preexisting equipment and cooperating with affiliated organizations. Also, an advantage of being a public hospital is the ability to advertise a new clinic via public agencies. The fact that patients of all ages visited our clinic for various reasons indicates that women are interested in Anti-Aging health screening tailored for women as a step toward total health care.

KEY WORDS: Anti-Aging, health screening, public hospital, women, total health care

Introduction

At the forefront of preventive care in Japan, Anti-Aging health screening is aimed at achieving healthy longevity for Japan’s aging population. However, a gap remains between the public interest in health screening and actual screening attendance. It is more difficult to access cutting-edge medical care and health information in rural areas than in metropolitan areas, and the burden of cost is higher because such care is not covered by national health insurance. This makes out-of-pocket medical expenses often high among rural populations, which in turn makes establishing cutting-edge health screening systems difficult in local communities.

Through collaboration with the Fukui Medical Association, Fukui prefectural government started a prefectural Anti-Aging project, “Fukui WASASADO Check”, in 2007 1-3). Using this project as a model system, the Department of Obstetrics and Gynecology at our hospital became the first public hospital department in Japan to establish an Anti-Aging health screening clinic for women. Here, to help explore effective ways of establishing such services in rural areas, we examine the difficulties we encountered before opening and the solutions developed, as well as the characteristics of the women who visited for screening.
Methods

Opening the outpatient clinic

We developed a plan to establish an Anti-Aging outpatient clinic in August 2011. To obtain permission, we presented the plan to the hospital director (a surgeon), the assistant directors (internal medicine and obstetrics and gynecology specialists), the head of the clinical laboratory department, and administrators. Because the first author is a specialist in obstetrics and gynecology, it was decided that the outpatient clinic would be operate as part of the Department of Obstetrics and Gynecology and serve as a special outpatient clinic for women aged over 30 years. The clinic was named the Anti-Aging Outpatient Clinic as recommended by the public health department and subsequently became an independent department on Anti-Aging health care. The first author and one nurse managed the clinic and started by seeing up to four patients for 30 min on one afternoon each week. We spent 30 min explaining the health screening results to the patient 2 weeks after the checkup. To obtain the cooperation and understanding of hospital staff, we presented an educational seminar on Anti-Aging Medicine and the outpatient clinic to physicians, pharmacists, midwives, nurses, clinical laboratory technicians, occupational therapists, and nutritionists at our hospital. We also obtained advice on equipment operation and management from Dr. Isozaki of the Anti-Aging Medical Research Center, Graduate School of Life and Medical Science, Doshisha University. After 5 months’ preparation, we opened the outpatient clinic on January 20, 2012.

Information dissemination

Prior to opening the clinic, we collaborated with the department of public relations at our hospital and local city hall to disseminate information on Anti-Aging Medicine and Anti-Aging health screening. We used various means, including a seminar presentation to local residents at the public health department in Warabi City and an inaugural lecture to healthcare professionals at the Warabi-Toda Medical Association. In addition, the local newspaper and TV provided news on the opening of the clinic as a public facility.

Subjects

Subjects were 34 women in their 30s-80s who visited the Anti-Clinic Outpatient Clinic at Warabi City Hospital during a one-year period between January 20, 2012, and January 2013.

Clinical examination and diagnosis

As indicators of aging, the functional age of muscle, bone, and the vascular, nervous, and hormonal systems were assessed as outlined below. Patients were informed of the findings and any diagnosis while receiving given proper guidance.

The Anti-Aging Quality-of-Life Common Questionnaire was used to evaluate subjective symptoms. In addition to hemanalysis items specified as health checkup items, a dual-frequency body composition monitor (DC-320; Tanita Co., Itabashi, Tokyo, Japan) was used to measure body weight, percent body fat, and leg muscle mass to determine muscle age. To determine bone age, bone density as measured by young-adult mean percent and the level of calcium (g/cm²) was determined using dual-energy X-ray absorptiometry (DCS-600; Hitachi Aloka Medical. Ltd., Mitaka, Tokyo, Japan). Vascular age was determined based on pulse wave velocity obtained using a cardio-ankle vascular index monitor (VaSera VS-1000; Fukuda-Denshi Co., Bunkyo, Tokyo, Japan), as well as on the level of homocysteine obtained by hemanalysis. A high-level cognitive task (Wisconsin Card Sorting Test) was used to evaluate neurological age. The levels of insulin-like growth factor-I, dehydroepiandrosterone sulfate, cortisol, and total testosterone were measured as the parameters of hormonal age. To determine the degree of oxidative stress, the Diacron reactive oxygen metabolites and biological antioxidant potential were measured as aging-related risk factors using the CARRIO-400 system (Wismerll Co., Bunkyo, Tokyo, Japan).

All results were analyzed using the Anti-Aging health screening diagnostic support system (Age Management Check®; Ginga Kobo Co., Nagoya, Aichi, Japan (http://www.amc-s.com/promo/)).

Checkup items and necessary equipment were determined in accordance with the Anti-Aging health screening diagnostic support system and the article by Dr. Yoshikazu Yonei of the Anti-Aging Medical Research Center, Graduate School of Life and Medical Science, Doshisha University.

Results

The total number of new patients was as high as 14 in the first 3 months owing to media relations and seminar activities. We then started our regular contributions to the city newsletter and have maintained a similar number of new patients per month (Fig. 1). Hospital visits were triggered by newspapers in 22% of the patients, city newsletters in 18%, television in 12%, in-hospital information systems in 12%, referral from a university hospital in 18%, and other in 9%, with television, newspapers, and newsletters together accounting for >50% of patients (Fig. 2). With regard to age distribution, 20% of the patients were in their 30s, 21% in their 40s, 12% in their 50s, 15% in their 60s, 23% in their 70s, and 9% in their 80s, with relatively uniform distribution across all age groups (Fig. 3).

The primary reasons for their visit were “a history of treatment for pre-existing illness” and “the presence of specific symptoms” in 35% of patients (concerned group) and “interest in the functional age of various body components” and “interest in health” in 56% of the patients (interested group). The number of patients was slightly higher in the concerned group than in the interested group in almost all age groups (Fig. 4 and 5). The rate of preexisting illness was 57% for patients in their 30s, 28.6% for those in their 40s, 75% for those in their 50s, 40% for those in their 60s, 87.5% for those in their 70s, and 100% for those in their 80s (Fig. 6). Diseases newly detected on screening were osteoporosis in 8 patients and sexual dysfunction, hypertension, atherosclerosis, and depression in 1 patient each (Fig. 7).
Fig. 1. Public relations activity and the number of patients screened per month

Fig. 2. Source of the information about our clinic that prompted the screening visit

Fig. 3. Breakdown of patients by age group
Fig. 4. Primary reasons for visit

Fig. 5. Reasons for visit by age group

Fig. 6. Prevalence of pre-existing illness by age group at the time of screening
While preparing to open the clinic, however, we encountered problems related to the equipment required, initial expenditure, diagnostic system, and regulations unique to public hospitals. Because our hospital already had all of the required equipment, we were able to minimize the initial expenditure for setup and subsequently lower the patient’s expense to somewhere between ¥6,000 and ¥25,000. In addition, the use of the Anti-Aging health screening diagnostic support system enabled us to analyze data from individual patients consistently. This will also allow us to develop a standardized data management system if the outpatient clinic service expands into a local government project in the future. The proposal to use an external health screening diagnostic support system came under strict consideration because of the concern over sending patient data out of the hospital to an outside organization. However, the health screening diagnostic support system uses secure socket layer encryption over the network, and because the system does not involve the installation of the application, we were able to lower initial expenditure. Because of these advantages and because it would cost over ¥1,000,000 to establish our own data management system, the use of the external health screening diagnostic support system was approved.

As we were prohibited from recommending dietary supplements manufactured by certain companies, we instead educated patients on the beneficial components of supplements. Similarly, we were not able to carry supplements inside the hospital because only vendors who have been approved by the purchasing department can supply products. With regard to disseminating information about the outpatient clinic in advance of its opening, it was beneficial to use media affiliated with public agencies such as the local city hall and public health department. The preexisting disease commonly seen in patients over age 50 was lifestyle-related disease, and many patients in their 30s were referred for premature menopause by the obstetrics and gynecology department of a university hospital. In addition, our health screening discovered osteoporosis in many of the patients aged over 60. After the initial screening, we continued to provide treatment covered by health insurance to the patients at the Department of Obstetrics and Gynecology. We also followed up on the Anti-Aging status of the patients. We believe that Anti-Aging health screening for women will, in cooperation with a department of obstetrics and gynecology help them to establish their individual total health reference point. To successfully achieve this, it is necessary for the women to increase the number of hospital visits they make and for our hospital to continuously inform the public about our clinic, while also establishing a connection between our Anti-Aging health screening and other health checkups, cancer screening, and company health screening.  

![Fig. 7. Disease newly detected on health screening](image)
References


