

Physical Fitness, Aging, and Sexuality

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Sexuality is a major quality-of-life issue, even into advanced age. Although relatively few studies have addressed sexuality, most studies have emphasized the decline in both sexual performance and satisfaction with aging. In an effort to assess possible positive modifiers of the decline, we included questions concerning sexuality in a multipurpose 90-item questionnaire submitted to members of the Fifty Plus Fitness Association based in Stanford, California. This group is unique in its commitment to a very active lifestyle and has served as a cohort for many prior studies related to fitness and medical outcomes. Sixty-seven percent of the membership returned the mail questionnaire, and 59% of these respondents replied to the sexually relevant items. The results indicated a high level of sexual activity and satisfaction in both older men and women of the Fifty Plus Fitness Association members. Further, sexual satisfaction seemed to correlate with the degree of fitness. We conclude that physical fitness and high levels of sexual activity are mutually supportive elements of successful aging.

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Everyone wants to live longer if the latter years are replete with the vitality, virtues, and values of young life. A long life of high functional capacity until the moment before death is the universal ideal.

Conversely, biologic, cognitive, and social decrements clearly cast the prospect of aging in a dim light.¹ One of the most prominent losses is the decline in sexual functioning in older people of both sexes.^{2–4} For the male such loss is due predominantly to problems with erectile competence. For the female the loss is tied closely to untreated menopausal conditions and to decreased social opportunity.⁵ Both genders identify a desire for more sexual activity than they are experiencing. In other words, what they report as usual is not successful.⁶

Methods

In an effort to characterize behaviors that might improve late-life sexuality, we included questions regarding sexual activity and sexual satisfaction within a 90-item questionnaire submitted to the membership of the Fifty-Plus (50+) Fitness Association, an organization of older persons who are bonded by the pursuit of a physically active mode of life. The association comprises about 2,000 members nationwide, who share a common interest in demonstrating the effects of a physically active lifestyle on the health and well-being of older persons. The age range of the membership is 50–94 years; the average age is 61.7 years. Eighty-five

percent of the members are college graduates, and they pursue a wide range of sports activities of which jogging, biking, and walking are most commonly reported. Only a few elite athletes are part of the group. The organization has served as a cohort in numerous major research projects dealing with mortality⁷ and several disease states such as cardiovascular, musculoskeletal, and psychologic conditions.

The data reported here are part of a larger longitudinal study funded by the StairMaster Corporation (Kirkland, Washington), in which the 50+ fitness group is coupled with the long-established College Alumni Study under the leadership of Dr Ralph Paffenbarger of the Stanford University School of Medicine and the Harvard School of Public Health.⁸ The 50+ group is contrasted with the less-active alumni group in numerous health outcome measurements, some of which are reported elsewhere.⁹

Questions regarding sexuality were included in the questionnaire that was sent to the 50+ fitness group, and these questions allowed an opportunity to generate unique information regarding aging, sexuality, and physical fitness.

The questionnaire was mailed to all members of the 50+ Fitness Association and returned to the office. Sixty-seven percent of the membership returned the questionnaire, and 59% of the 1,039 returned forms contained responses to the sexually related items.

One question requested information on the frequency per week of bouts of intimacy—we presume that

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Table 1.—Frequency of Intimacy and Intercourse Per Week by Age and Sex*

Times Per Week	Aged 50–59		Aged 60–69		Aged 70+	
	Female (n = 176)	Male (n = 178)	Female (n = 157)	Male (n = 321)	Female (n = 56)	Male (n = 134)
0	28% [28%] †	11% [14%]	39% [42%]	16% [21%]	62% [64%]	21% [29%]
<1	19 [22]	16 [27]	20 [27]	28 [36]	10 [20]	25 [35]
1–2	32 [38]	46 [43]	27 [24]	33 [35]	15 [10]	35 [32]
3+	21 [11]	28 [15]	14 [7]	22 [7]	13 [6]	18 [3]
Not applicable	n = 26	n = 4	n = 30	n = 14	n = 16	n = 8

*Survey questions were: "In an average week, how frequently do you have sexual intimacy?" and "... how frequently do you have sexual intercourse?"
 †Number equals percentage frequency of intimacy of applicable respondents. Brackets represent percentage frequency of intercourse.

intimacy is kissing, hugging, massage, and activities including but not limited to sexual intercourse.

Results

Table 1 shows the weekly frequency of sexual intimacy and intercourse of the 50+ Fitness Association members according to age group and gender. The "not applicable" group represents those without a sexual partner and is excluded from the calculated percentages. A substantially higher percentage of female members lack a partner. Also shown is the high frequency of sexual expression by both sexes: 53%, 41%, and 28% of females reported one or more bout of sexual intimacy per week for the 50–59, 60–69, and 70+ age groups, respectively. The corresponding figures for the males are 74%, 55%, and 53%. The data for sexual intercourse are somewhat less than that for intimacy, yet still reflect robust sexuality even past age 70. For men and women, the frequency of intimacy and intercourse declines with age, but the men have a higher frequency at all ages. Over 60% of the women over 70 report no intimacy or intercourse per week, whereas less than half this percentage (29%) of male respondents do.

Similarly, when degrees of satisfaction with one's sex life were assessed, 44% of all females expressed satisfaction, and 33% expressed dissatisfaction (Table 2).

The men reported 61% satisfaction and 29% dissatisfaction. We should note that these calculations include even those with no sexual partners. Presumably, if only those with partners were considered, then the satisfaction percentages would have been higher. Furthermore, the aging process does not seem to affect satisfaction despite a clear decline in frequency both in bouts of intimacy and intercourse.

Discussion

An earlier survey of a smaller number of 50+ Fitness Association members over the age of 70 revealed that 60% of the males (n = 26) rated their sexual activity as good, 28% fair, and 17% poor.¹⁰ Similar figures for the five respondent females over 70 years of age were 40%, 40%, and 20%, respectively.

In an effort to see whether there may be an association between the degree of fitness as estimated by the 50+ Fitness Association members and their frequency of intimacy, we found the data to reveal that improved fitness levels are positively associated with frequency of sexual intimacy. Thirty percent, 38%, and 66% of the females reported one or more bouts of sexual intimacy per week for the least, middle, and most fit groups, respectively. The corresponding figures for the men are 46%, 60%, and 63%. Interestingly, improved fitness also

TABLE 2.—Satisfaction with Sex Life

How Satisfied	Aged 50–59		Aged 60–69		Aged 70+	
	Female (n = 170)	Male (n = 182)	Female (n = 1497)	Male (n = 322)	Female (n = 48)	Male (n = 137)
Very	8%	32%	25%	27%	25%	31%
Somewhat	21	37	20	31	6	29
Neither	19	7	20	10	42	13
Dissatisfied	18	14	19	24	19	20
Very dissatisfied	12	10	16	6	7	7

showed a strong positive correlation with the degree of sexual satisfaction in men, but not in women.

We fully acknowledge methodologic limitations of this survey. The respondents are self-selected and are by definition not representative of the community at large. Furthermore, the questions were not statistically validated, and so, the data must be interpreted with this in mind. We did not have a control group; we have, however, sampled a less physically active group drawn largely from the same geographic area, age group, and educational background.

The relationship of sexuality to longevity compels interest. A Swedish study found that males, but not females, who had discontinued intercourse had elevated death rates.¹¹ Recently, a report titled *Sex and Death: Are They Related?* was published by the Department of Epidemiology and Public Health at the University of Bristol and Queen's University in Belfast and concerns a survey conducted in 1979–1983 of 1,222 men aged 45–59.¹² The group consisted of the entire similar-aged male population of a town, Caerphilly, in South Wales. At recruitment, a standard history and physical examination was carried out and a set of questions regarding frequency of sexual intercourse was asked by a medical interviewer. Seventy-five percent of the men ($n = 918$) responded to the sexuality question. A 10-year follow-up of the respondents revealed that 150 men had died (16%). When age was adjusted, the men who were in the sexually active group had half the mortality of the inactive group, suggesting a dose-response type of relationship. This result is similar to one report by Palmore at Duke, 16 years ago.¹³

The Belfast results were adjusted for social class, blood pressure, smoking, cholesterol, and heart disease history, but physical activity was not considered. Perhaps the survivors were physically active in addition to their increased rate of intercourse, and the exercise may have been the modulator, and the sexuality only an associated factor.¹²

Our study seeks to include physical activity as well as sexuality in the life-span equation. Although we do not have specific mortality data versus the other variables in our group, we know that the overall mortality of the 50+ Fitness Association is only 30% of an inactive control group.⁷

Furthermore, the 50+ group is more sexually active than earlier reports indicated. Establishing causal relationships—whether the greater fitness facilitated more sexual activity, or the reverse, or whether both are reflections of other functions, which are still not understood—is not possible.

The information we mentioned deals largely with men. The story for women may be different. The cited

Duke study revealed that female longevity was associated with enjoyment of intercourse rather than its frequency.¹³

The membership of the 50+ Fitness Association has a low incidence of early mortality.⁷ They also have been shown, in this study, to have high levels of sexual activity. Therefore, the three dimensions of age, physical activity, and mortality are related. The causal sequence is uncertain. We encourage the clinician to include questions regarding sexuality when taking the medical history of older persons, and if problems are revealed, to suggest that a program of physical exercise may be a valuable prescription.

An editorial in the *British Medical Journal* observed “what we thought was bad for you may actually be good for you, but it may not be good to tell you in case you do it too much, and it is certainly not good to tell you it is good for you if you do too much of it already.”¹⁴

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