Prevalence of Voice Problems in Priests and Some Risk Factors Contributing to Them

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Summary: Objectives. The purpose of this questionnaire study was to explore the prevalence and possible risk factors for voice problems in priests.

Methods. About 2044 evangelical Lutheran priests received a link to an electronic questionnaire and 44.1% (n = 901) completed it. Of the participants, 53% were males and 47% were females.

Results. The results showed that the prevalence of voice problems in priests was high. Of the participants, 24.5% had sought help for voice problems and 18% reported that they had been diagnosed with a voice disorder by a physician. Twenty-one percent considered themselves as having current voice problems, and 26.7% reported frequently occurring vocal symptoms. Voice-related absenteeism was reported by 11.6%. Significantly, more females than males reported voice problems. There were significant associations between frequently occurring vocal symptoms and several environmental- and health-related risk factors. More than half of the participants considered that they had received less than 5 hours of information on the voice and voice use. The association between frequently occurring vocal symptoms and the number of hours of information on the voice and voice use was significant.

Conclusions. The results of this study indicate that the prevalence of voice problems among priests is high. Prevention of voice problems for priests is recommended. Voice training programs should be included in the curriculum for all those who are studying to become priests. For those already working as priests, practical courses on voice training could be arranged. Additionally, priests should get information on voice-related issues from the occupational health care or other health care services.

Key Words: Voice problems–Priests–Risk factors.

INTRODUCTION

Voice problems are common in persons working in vocally demanding occupations.[1–4] Environmental risk factors for occupational voice users are, for example, talking for long periods, talking over background noise, and talking in rooms with poor acoustics and air quality.[1,4,5] Health-related risk factors include frequent colds and sinus infections, reflux, respiratory allergies, and asthma.[4,6,7] Persons who are at risk for having voice problems may be teachers, lawyers, singers, and priests.[1–3] Priests are recognized as occupational voice users, and their work includes, for example, leading sermons and singing or chanting.[1] Priests also speak in noisy environments[8] and give religious teaching and spiritual counseling.[9]

To our knowledge, there are only a few modern studies on the prevalence of voice problems in priests. In some of the studies, the study populations are quite small. The results of the perceptual evaluation in a study on six female priests showed that they had deviant voice quality.[8] Additionally, the researchers concluded that the priests had vocally abusive behavior. Neto et al[9] conducted a questionnaire study on vocal health in 56 male priests and found the prevalence of vocal complaints to be high. The most common vocal symptom when speaking for long times was throat clearing reported by 78.5%. Other symptoms were hoarseness reported by 57.1% and pain or irritation in the throat reported by 51.8%. Of those who suffered from hoarseness, 87% reported the hoarseness to be episodic and related to vocal loading. The results showed that many of the priests worked long hours, some even more than 10 hours a day.[9] Hapner and Gilman[10] conducted a questionnaire study on 75 Jewish cantors, 34% males and 66% females, to explore the occurrence of laryngeal symptoms. Jewish cantors have similar responsibilities to priests and have several voice-demanding duties and act both as spiritual and musical leaders. The results showed that 65% had voice problems that had a negative effect on their ability to work. Most cantors used their voice at least 45 hours a week. Risk factors for voice problems were, for example, high vocal loading and demands, too little voice rest, and health-related risk factors such as allergies and reflux.[10]

Hočevar-Boltežar[11] conducted a questionnaire study on a larger population to explore the prevalence of voice problems in Catholic priests. Of 600 priests, 340 answered the questionnaire. The results showed that 85.6% had suffered from voice problems at some point of their career and 15.9% had frequent voice problems. Voice-related absenteeism was reported by 12.1%. Repeated throat clearing was reported by 55.8%. Other risk factors were symptoms of reflux reported by 32.9%, asthma and allergy reported by 15.5%, and smoking reported by 7.6%. Of the participants who had voice disorders, respiratory infections were reported by 41.5%. Of the participants, 76.1% reported that they were speaking loudly at work, 48.7% reported lack of knowledge of correct voice use, and 29.9% reported vocal load during spare time. Current voice problems were reported by 15.7%.

The results of previous studies on voice problems in priests indicate that voice problems are common in this occupation. The primary purpose of this study was to extend the literature by investigating the prevalence of voice problems in a large

Accepted for publication August 25, 2014.

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Journal of Voice, Vol. 29, No. 3, pp. 389.e11-389.e18
0892-1997/$36.00

http://dx.doi.org/10.1016/j.jvoice.2014.08.015

TABLE 1.
Number of Participants Who Had Sought Help for Voice Problems, Who Had Been Diagnosed With a Voice Disorder, Who Considered Themselves as Having Current Voice Problems (n = 869–885) and a Comparison Between Female (n = 407–413) and Male Participants (n = 458–468)

	All Participants		Females		Males		
Variable	n	%	n	%	n	%	χ^2
Had sought help for voice problems	217	24.5	128	31	89	19	$\chi^2(1) = 16.949$, $P < 0.001$
Had been diagnosed with a voice disorder	156	18	92	22.6	64	14	$\chi^2(1) = 10.859$, $P < 0.001$
Considered themselves as having current voice problems	186	21	105	25.6	80	17.1	$\chi^2(1) = 9.529$, $P = 0.002$

group of priests and to identify possible risk factors for voice problems. Another purpose was to explore possible gender differences in the prevalence of voice problems.

MATERIALS AND METHODS

Participants

A link to an electronic questionnaire was sent to 2115 of the totally 2155 evangelical Lutheran priests in Finland, of which 94.8% (n = 2044) received the e-mail. The addresses were acquired by the Finnish Association for evangelical Lutheran priests. The questionnaire was available on the Internet for a month, and altogether 901 priests completed it. The overall response rate was 44.1%. Of the 901 participants, 12 were excluded because they did not work with typical priest tasks or because they did not work as priests at all at the moment. The final sample consisted of 889 priests. Of them, 53% were males and 47% were females. The percentage of male and female participants is well in line with the statistics from Evangelical Lutheran Church of Finland because 43% of the priests in 2013 were females.[12] The participants had worked as priests between less than a year and 41 years (mean = 16.8, standard deviation = 10.8). Of the participants, 7.3% were 20–30 years old, 31.8% were 31–45 years old, 49.2% were 46–60 years old, and 11.2% were older than 60 years.

Participation in the study was voluntary, and anonymity was guaranteed. Approval to conduct the study was given by the Ethics Committee of the Department of Psychology at Åbo Akademi University.

Data collection

The data were obtained with an electronic questionnaire containing 33 multiple-choice (two, three, or four answering alternatives) and open-end questions. The questionnaire was self-explanatory, and no explanations or definitions were provided. The questions chosen were based on previous studies on voice disorders in various populations.[6,7,13–16] The questionnaire included demographic questions and questions about voice problems during the career and present voice problems. Questions on vocal symptoms occurring during the past year were also asked. The vocal symptoms were voice becomes strained or tires, voice becomes low or hoarse, voice breaks while talking, difficulty in being heard, throat clearing or coughing while talking, and sensation of pain or lump in the throat. The frequency alternatives for the occurrence of the symptoms were daily, weekly, seldom, or never.

Questions concerning work-related factors that might have an impact on the voice, such as time of vocal load during a workday and voice-demanding activities such as preaching and singing, were queried. Other questions about the working environment were about speaking to a large audience, speaking to an audience that is at a distance, speaking in noisy or reverberant environments, and speaking outdoors. One question on the use of voice amplification was included. The health-related questions included questions about occurrence of rhinitis, allergies, reflux, asthma, and asthma medication. Work absence because of voice problems and a question about smoking habits were also enquired. The questionnaire included a question inquiring whether the vocal symptoms had an effect on the participant's mood.

TABLE 2.
Number of Participants (n = 884) Having Frequently Occurring Vocal Symptoms and a Comparison Between Females (n = 412) and Males (n = 467)

	All Participants		Females		Males	
Vocal Symptoms	n	%	n	%	n	%
Seldom or never occurring symptoms	494	55.9	213	51.7	280	60
One frequently occurring symptom	154	17.4	61	14.8	90	19.3
Two or more frequently occurring symptoms	235	26.7	138	33.5	97	20.8

$\chi^2(2) = 18.459$, $P < 0.001$.