

Voice Injury in Teachers: Voice Care Prevention Programmes To Minimise Occupational Risk

Author: Cecilia Pemberton Speech Pathologist. Voice Care Australia

A primary aim of education policy should be the maintenance and nurturing of the existing teacher workforce. The incidence of voice injuries in the teaching profession is an important occupational health and safety issue which is starting to be recognised but has not yet been comprehensively addressed.

Yet research, in Australia and throughout the world, shows that up to 20% of teachers experience voice problems each year.^{1, 2} Teachers are between three and five times more likely to experience voice problems than the general population^{1, 3} and are a staggeringly 32 times more likely to report voice problems than the general population².

We also have good evidence that the teachers are a significant population in the new referrals to voice centres that is disproportionate in their representation in the workforce. Studies have been conducted in

- n the USA where the teachers are 20% of voice referrals but only 4% of the workforce⁴,
- n Europe 16% of referrals but 6% of the workforce⁵ and
- n UK 15% of voice referrals but 2% of the workforce⁶

The majority of these voice problems should be preventable if teachers are provided with the right information about voice care.

While it is generally agreed that around 20% of teachers experience voice problems there are differing reports as to the type of teaching that is most likely to experience problems. While not comprehensively agreed upon by all researchers, the incidence of problems in music teachers, physical education teachers, language teachers and preschool and primary school teachers seems to be most commonly reported.^{5, 2, 7, 8} Female teachers are twice as likely as male teachers to report voice problems or symptoms.^{1, 2}

A recent study conducted by Catholic Education Wollongong²¹ and myself supports my own clinical experience that there is a high incidence of voice problems in teachers early in their career (1-5 years) and another increase in the incidence of problems after 15 years of teaching while the incidence of problems in the 6 -15 years of teaching range is reduced.

We also have evidence⁹ that many teachers tolerate voice problems and do not seek help, this may exacerbate the voice problem and my clinical

experience would certainly indicate that this prolongs the necessary treatment of voice injuries.

A recent report from France indicates that 20% of the sick leave of teachers is due to voice problems while in the general population it is 4% of sick leave¹⁰

The cost of days lost due to voice problems is significant in Australia and throughout the world. In a survey of teachers in South Australia Alison Russell in 1999¹¹ reports teachers take 0.7 days per year due to voice problems, the same question was asked in the Wollongong project in 2008 and found teachers had 0.8 days off due to voice problems in 2007.

If we estimate the replacement teacher cost at \$250 per day this equates to \$47,927,800. In addition to these replacement costs are the medical costs associated with voice problems. Given that we already know few teachers seek help (1% as reported earlier) this cost has to be regarded with that in mind. Teachers seek the advice of health professionals 0.3 times per year regarding voice problems, if these visits are averaged at \$60 per visit; this is an additional cost of \$4,792,800. So the total cost of voice injury to is \$52,679,261. This is without any workers compensation claims and all of the additional cost associated with these claims such as increased insurance premiums and medical costs.

There are also significant but hidden costs of voice problems. Researchers report that even a mildly hoarse voice can have a significant impact on student learning.^{12, 13} We also know that teachers are less effective if they have a problem with their voice^{2,14,23}, voice problems interfere with job performance²³, job satisfaction²³ and as previously noted causes absenteeism^{2,14} Voice problems can cause loss of trained staff as teachers leave the profession, some through medical retirement but many to take employment in less vocally strenuous occupations⁹. Not only do the voice problems at work affect the working life of a teacher, but as reported by Smolander & Huttunen¹⁵ teachers report their social and family life is restricted. These researchers also noted the teachers had more difficulty with disciplining students.

The types of voice problems that teachers present to voice clinics are for the most part related to vocal load or “phonotrauma” Buttifant¹⁶ et al reported 83% of teachers had load or risk type vocal fold injury.

There is mounting evidence that voice care education and voice training can have a positive impact on preventing voice problems^{17, 18, 19}

Voice injury in teachers is a significant problem albeit as yet unrecognized by most institutions. To help prevent problems prevention programmes should be adopted throughout schools as an annual part of OH&S programmes.

The Voice Care for Teachers DVD²⁰ which is a prevention DVD designed to help prevent voice problems. The main section of the DVD runs for 16

minutes and has been developed so that it can be shown as part of a staff meeting. In addition the DVD has practical information for teachers that can reduce the vocal load and risk that teachers are exposed to every day. These segments can be viewed as stand alone packages or can be incorporated into a comprehensive OH&S programme. Included are:

- n Classroom management strategies
- n Classroom acoustic management
- n Voice care techniques
- n How to seek help
- n What voice therapy entails
- n Types of voice problems experienced by teachers

In addition included on the DVD is a pdf which can be downloaded and printed for every teacher in the school. The booklet includes all of the information in the main section of the DVD plus all of the voice care techniques and voice symptom and risk charts. This information should be provided for all teachers on an annual basis so that teachers regularly review their voice and assess it for both load and risk.

The Wollongong Voice Care Project,²¹ which is being conducted by myself Jane Comesoli and Christine McCormack, has provided the Voice Care for Teachers DVD to all schools in Wollongong Diocese in addition schools have been provided with a Voice Care tips poster. Bookmarks with voice care tips have been provided to each teacher in the diocese.

In addition schools will incorporate voice on their risk assessment tool and encourage voice care strategies within the school such as supporting behaviour management programmes that minimise voice risk and voice load.

As research shows that amplification can also be beneficial in preventing voice problems²² schools will have amplifiers available for playground duty, sporting activities and outdoor voice use, as well as having amplification available for teachers experiencing URTI or vocal fatigue.

In addition, this project is providing voice care education and voice training to all beginning teachers and returning teachers as part of an induction process. As a matter of equity as well as for appropriate risk management these training programmes will also be available to be accessed by any teacher who feels they would benefit from voice training.

As teachers do not seek help early and we know that voice problems can be exacerbated by delayed intervention the Wollongong project is providing access to EAP type programmes for voice problems with advice as well as treatment available for teachers with symptoms. This may significantly reduce the compounding effects of poor vocal habits that can be established if voice problems are not treated early enough.

In summary as we know that teachers are at risk of experiencing voice problems, a model for prevention should include:

- n Comprehensive OH&S Policy
- n Comprehensive voice care programme
- n Provision of portable amplification systems
- n Voice Care Workshops for:
 - o Student teachers
 - o Beginning teachers & returning teachers
 - o Any teacher wishing to participate in voice training
- n Early Intervention Programmes
 - o Early voice symptoms / additional vocal training

If you would like further information about any aspect of this paper please call Cecilia Pemberton 0412442617 or email info@voicecareaustralia.com.au or visit our websites: www.voicecareforteachers.com or www.voicecareaustralia.com.au

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