

Single-lens distance glasses reduce falls in active older people

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Providing single lens distance glasses to older people who wear multifocal glasses and who regularly take part in outdoor activities is a simple and effective way of preventing falls, concludes a study published in the British Medical Journal today.

However, the researchers warn that this strategy may not be appropriate for frailer people who spend more time indoors.

Presbyopia (a progressively diminished ability to focus on near objects) is the most common form of impaired vision in [older people](#). To correct for this condition, people are either prescribed separate single lens glasses for distant and near vision or, for convenience, a single pair of multifocal (bifocal, trifocal, or progressive lens) glasses.

Multifocal glasses have benefits for tasks that require changes in focal length, such as driving, shopping and cooking. But they also have optical defects which can impair balance and increase the risk of [falls](#) in older people.

So researchers in Sydney, Australia set out to test whether giving older people an additional pair of single lens distance glasses for wearing when outdoors or in unfamiliar settings would help to reduce falls.

The study involved 606 people who were at high risk of falling (either aged 80+ years or aged 65+ years with a history of falls). All participants used multifocal glasses at least three times a week when walking

outdoors and did not use single lens distance glasses.

Participants were randomly split into an intervention and a control group. After an initial examination by an optometrist, 305 intervention participants were prescribed a pair of single lens distance glasses for wearing outdoors and in unfamiliar settings, and were instructed in their use. They were also shown how multifocal glasses can increase the risk of falls.

The remaining control participants had the same optometrist examination as the intervention group but were not provided with single lens glasses and received no falls prevention advice.

Participants were monitored for 13 months. During that time, total falls in the intervention group were reduced by 8% compared with the control group. For those who regularly went outdoors, all falls, outside falls and injurious falls decreased significantly - by about 40%. However, for those who spent more time inside, outside falls increased significantly.

The intervention did not influence physical activity or improve quality of life.

Based on these findings, the authors recommend that older people who take part in regular outdoor activities should be provided with single lens distance glasses for outside use when they are prescribed their first pair of multifocal glasses. However, those who undertake little outdoor activity should use multifocal glasses for most activities, rather than using multiple pairs of glasses.

In an accompanying editorial, Professor John Campbell and colleagues at the Dunedin School of Medicine in New Zealand say that correcting vision can help lower the likelihood of a fall, but that any changes should be introduced step by step in a planned manner so that a person is not

overwhelmed. They also recommend good communication between doctors and optometrists when considering vision, glasses and the risk of falls.

Provided by British Medical Journal

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