



# 3D health and safety

In the third report on *Optician's* round table discussion on 3D eyewear, the panellists discuss health implications and whether such concerns might deter practices from stocking the products

**W**hen quizzed earlier this year 25 per cent of *Optician* readers said they were worried about health concerns of 3D eyewear but what is this based on?

A recent round table hosted by *Optician* found that little conclusive research has been conducted in this area so should practices be concerned?

In the first report on the *Optician* 3D round table debate, concerns were raised about the effects of 3D viewing on the user. **Professor David Thomson** of City University and Thomson Software Solutions pointed out that there was little likelihood of adverse effects.

However, as the optical practice delegates pointed out, professionals will have a duty of care if they sell 3D eyewear, so they will be looking for evidence on which to base advice. **Professor Thomson** agreed. 'As soon as practices start providing 3D eyewear they become responsible for any symptoms. If the glasses come free with the TV it's not their problem.'

Although he doesn't expect 3D to cause major problems (see *Optician* 12.08.11) some people might be affected. For anything up to 10 per cent of the population there could be issues.

'For people with binocular vision (BV) problems it is important to point out that it's actually simulated 3D and it does put new demands upon the eyes,' he said. Optometrists need to think about what tests should be done. 'The problem is you have a difference between the vergence requirements and the accommodation requirements. You are accommodating at one point but converging at another and you are exercising your fusional reserves. Perhaps we should extend the clinical routine and put in a few new tests to pick up those few people who may be symptomatic.'

**Professor Thomson** said he had just looked at a PhD project which monitored patients' BV after viewing 3D. 'It's such a difficult area, all of the



Rex Features

conventional tests showed virtually nothing, but some patients were symptomatic. They were getting headaches and eyestrain and yet when you measured their fusional reserves or fixation disparity, all the conventional tests, they didn't show anything. Either we are measuring the wrong things or there is something psychological going on and it's nothing to do with BV.'

He said film makers were beginning to wise up by not having too much disparity with 3D films. 'They are also doing things like when objects pop out in depth they are blurred slightly. They are introducing some quite subtle changes to the way these things are produced.'

**Gordon Carson**, Boots Opticians professional services officer, agreed that a lot would depend on the type of tests used which would show up different results. He also commented on the area of BV and optometry more generally. 'Correct me if I am wrong, but would it be fair to say that one of the topics optometrists struggle with generally is binocular vision? So we might finally have a connection between something glamorous and this subject.'

Whatever new tests are used, an evidence base was needed, he said. 'We are, as optometrists, scientists. We like to see the evidence, look at the carcass and see how it works before we are comfortable to take it

## THE PANELLISTS

- **Sue Cockayne**, former Leightons managing director
- **Paula Baines**, dispensing development manager at Vision Express
- **Stephen Karbaron**, retail consultant
- **Kieran Minshull**, independent dispensing optician
- **Gordon Carson**, Boots Opticians professional services officer
- **Chris Knight**, sales and marketing director EMEA/Asia for Polaroid
- **Andy Hepworth**, professional relations manager at Essilor
- **Professor David Thomson** of City University and Thomson Software Solutions



## 3D eyewear debate

to market.' **Paula Baines**, dispensing development manager at Vision Express, agreed: 'If you are going to be selling 3D as prescription and overspecs to people who haven't had an eye examination then it's about supplying supporting information, educating staff on the front line and making sure you are fulfilling expectations. To know when to say no and not sell them a useless product.'

Leightons' former managing director **Sue Cockayne** said the proposed approach at Leightons was to create centres of excellence. 'It was a short-term business opportunity. What our staff were looking for was the authority [from the optical bodies] and the professional indemnity providers that we could go ahead and do it. That's the comfort blanket that they always want. If FODO or the College had told us that it was OK then they would be happy.'

But, as **Carson** pointed out, that professional advice isn't there at the moment.

Adding to **Professor Thomson's** view **Cockayne** suggested the dangers needed to be kept in proportion. 'Typically a patient might ask if prescription 3D specs were available as their children were seeing a film and the specs handed out at the cinema were not suitable. It wasn't about headaches and eyestrains. I think we can get a little too precious about this.'

'Something I would like to pick up on is the evidence base,' said **Andy Hepworth**, professional relations manager at Essilor. He said this was needed so a training model could be developed. He suggested that any chronic effect for juveniles might be looked at but conceded that looking at issues like this was difficult. He asked what research was being done.

'There is a lot of research going on at the moment but from what I've read it's pretty inconclusive,' replied **Professor Thomson**, referring to small sample numbers over short periods. He also pointed out that research was difficult in this area because whatever group you select there was massive variability in clinical characteristics.

**Cockayne** said all people really wanted to know was if, in the long term, it was going to damage their eyes. 'We should be able to give them a definitive answer to that. Shouldn't that be easy to do that research? You haven't got microwaves or anything to deal with like in mobile phones.'

**Carson** said the research had to underpin that advice like it had with VDUs. 'One of the difficulties is that



**Polaroid has been using Norville to approach the optical profession through advertising and editorial**

among the populations that might be affected are children and I can't put my hand on my heart and say that a mother is going to hand over their child for research.' There were also ethical considerations.

**Chris Knight**, sales and marketing director EMEA/Asia for Polaroid, pointed out that one of the manufacturers, Samsung, already advised that under sixes shouldn't use active 3D. Nintendo had also suggested younger children shouldn't use the technology and in parts of Italy younger children could not watch 3D films in the cinema.

**Hepworth** asked what research this was based on? 'Based on the fact that a child's eyes are still developing their stereoscopic balance and their accommodation,' suggested **Cockayne**.

In the absence of research on the topic or advice from the governing bodies (see *Optician* 12.08.11) the panel looked at the level of knowledge reported and some of the opinions gathered in the *Optician* research. This showed that an overwhelming majority (85 per cent) do see 3D eyewear as an optical practitioner's product but the need for education and advice was keenly sought. This was despite the fact that 88 per cent of practices had not been contacted by a supplier on the issue. Optometrists on the panel agreed that this had been their experience.

'I have had no contact with any 3D supplier, not just in the last 12 months but in the last 10 years,' said independent dispensing optician **Kieran Minshull**.

**Cockayne** said 3D was something she had actively had to seek out for herself and research on her own.

In defence of Marchon, retail consultant **Stephen Karbaron** said its

approach had been to look at 3D products as sunglass items as well and it had been active at trade events through its Kiss & Kill brand. This would be expanded into products such as Nike and would see the introduction of a prescription product before the end of the year. He admitted that the sales teams on the ground relied heavily on the technical teams in the Netherlands. 'For sure it is not really being pushed down through the lines to the optom market yet,' he said.

By far the biggest recognition of an optical market in the sector was Polaroid. It has been using Norville to approach the optical retail business through marketing, advertising and editorial. Along with Polaroid it hosted an education day in London earlier in the year which had produced editorial coverage.

*Optician's* research showed that training and information was what people wanted and **Hepworth** said it was up to the suppliers to provide that. He said Essilor's R&D teams had been working on the correct product for 3D that will be launching this year but the jury was still out on the market readiness. 'We will have to wait and see.'

What is clear is that 3D is still not being heavily promoted in practice. 'You don't see it being pushed as you are walking down the high street,' said **Cockayne**. She thought the marketing opportunity would come around the Olympics as had been traditional with sporting events. 'There are 30 new films planned between now and the end of the year they are doing remakes of everything,' she said.

**Knight** said his international experience showed that those who



## 3D eyewear debate

sold 3D alongside prescription eyewear were the most successful. It's a topic to raise in the recommendation conversation, he said. 'So far it's been around the cinema but we are really waiting for the passive TV wave.'

The group then discussed if a prescription route, overspecs, or clips-ons were the way to go for 3D. **Cockayne** agreed that, perhaps around the Olympics, a prescription product could be the turning point.

**Carson** agreed that the holy grail of 3D eyewear was the prescription product but stressed that it wouldn't be suitable for everyone. 'If there are people who can't have that product we need to be able to say why. We need that evidence to go back to.' Also if you are going to sell to kids the duty of care is much greater so there is that associated cost too.

**Baines** questioned the need for a prescription solution. 'I'm not sure I would go for a prescription pair myself. If there are only a certain number of events you are going to need them for, are you going to want a specific pair for specific events? I think it would be easier to have a pair that get shoved over any pair of specs I chose to wear or opt to wear without

specs.' She did wonder if the novelty of wearing 3D specs all the time would wear off.

**Minshull** suggested it came down to what enhancements suppliers offered with 3D products compared to overspecs and how much time the wearer spent looking at the TV. 'Perhaps some boffins or couch potatoes will be there watching 3D TV all day everyday and that's where the benefit of a prescription product would be. But if you are going to watch *Corrie* two times a week in 3D what's the problem in putting some overspecs over your existing comfortable glasses?'

Clips-on were another option.

**Knight** suggested practices could do both, as with prescription sunwear. **Baines** suggested 3D may become the second offer along with sunspecs. 'That's probably where it will get its market within the multiples.'

Those within the multiples suggested the size of the market would be key and with just 15 per cent of the TV market currently in 3D-ready TVs that may be some way off given the training and education needed.

'It's not like a pair of sunspecs,

there's knowledge and training and if it doesn't do what it says on the tin they [patients] are all coming back,' said **Baines**.

This echoes one experience in France where a chain took on 3D without understanding the products. The sales staff didn't know the difference between active and passive and everyone came back.

### Are the independents best placed?

So is this a market that the independent sector has to itself for a couple of years?

'As a company Vision Express is into innovation so I would be interested to see what its reaction will be,' said **Baines**. For **Boots**, **Carson** said: 'We have got a watching brief and we would never say never.'

'There's a market there but how big is it?' asked **Minshull**. 'I'm not sure, but if we have two years before the multiples get into it I'll be happy.' He reiterated that it was about education, information and professional guidelines. 'We need that first boat along before we can start marketing. If the Olympics are going to be the driver then time is running out.' ●

# Earn CET points every week

## It's easy to claim your points with Optician's CET scheme

- You can earn up to 60 points a year with Optician
- CET articles cover the requirements for Optometrists, Dispensing Opticians and Contact Lens Opticians
- Each issue includes a CET article, with a multiple choice online questionnaire
- Our online marking system automatically updates your GOC record

"Optician is bang up to date and weekly - plus all CET is free!"

Optometrist, Independent Optical Practice

"Good section on jobs, great for industry news and free CET!"

Dispensing Optician, North West England



Visit [www.opticiansubs.co.uk/950](http://www.opticiansubs.co.uk/950)

Or Call our Subscription Hotline

0845 077 8822 and quote 950

# Optician

The weekly journal for eye care professionals