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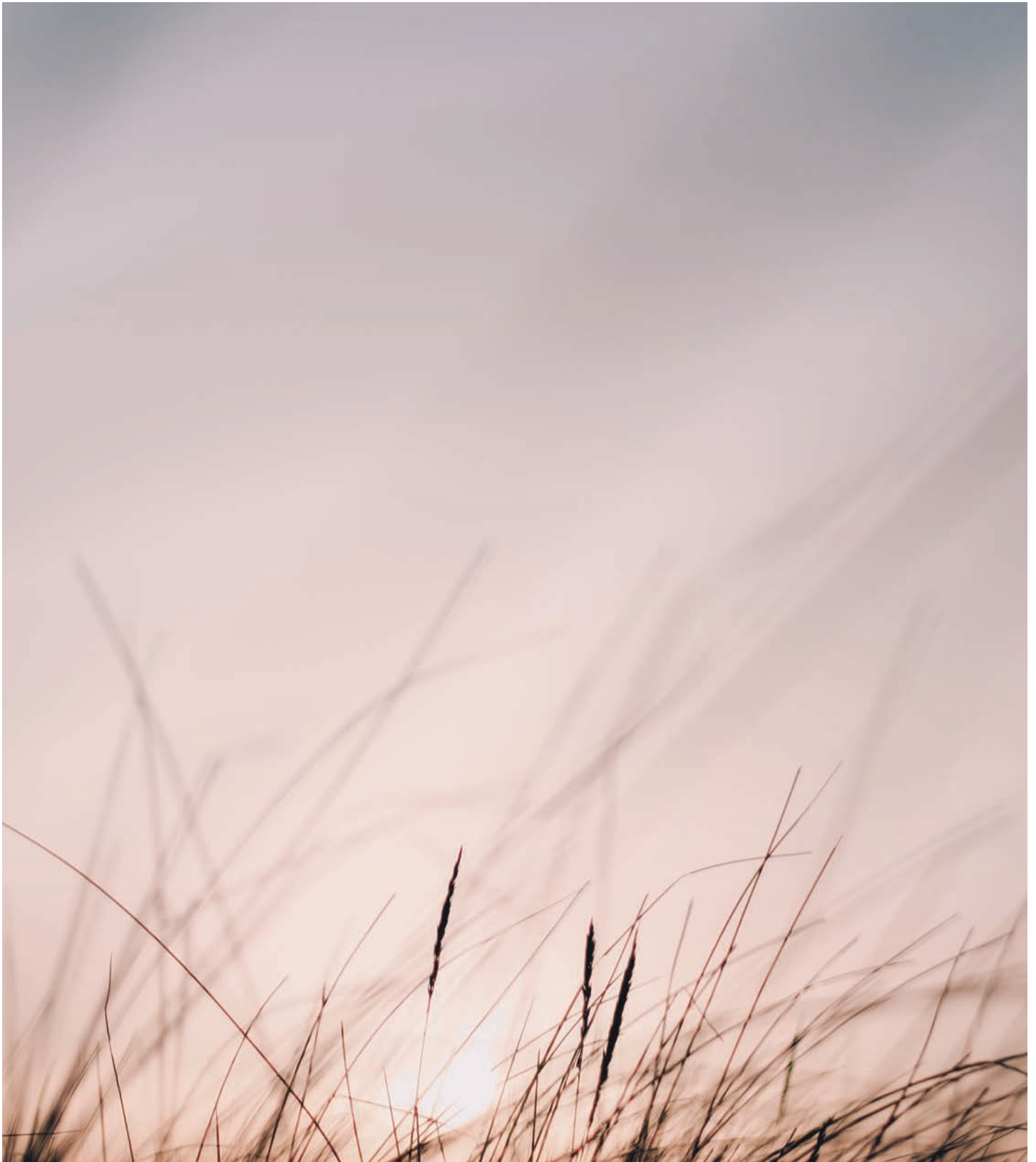
**AONA**

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# VISION

**NATIONAL NEWSLETTER**

**SEPTMEBER 2019**



# September 2019

Welcome to the September edition of The Australian  
Ophthalmic Nurses Association National Newsletter

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# AONANSW

## President's Report Joanna McCulloch

Our June Clinical on Saturday 22, 2019 at the Sydney and Sydney Eye Hospital, was a great success with over 80 ophthalmic nurses attending. This clinical on Retinal Management was unusual for AONA NSW as normally we run our Annual Conference.

The AGM provoked stimulating conversations about the future direction and educational focus of AONA NSW. Later in the year the new AONA NSW Committee will hold a planning day to workshop these ideas. If AONA NSW members would like to participate in this workshop, please contact the committee via the AONA NSW website, to express their interest. At the end of this meeting, all the committee positions were declared open.

At our last meeting in August, the incoming AONA NSW Committee confirmed their positions on the council. It is with regret that the 2018-2019 AONA NSW President, Michelle Remington decided to step down from her position as President and the committee, to pursue a new direction in her career. On behalf of AONA NSW, I wish her all the best.

The 2019-2020 AONA NSW Committee has been confirmed as:

<b>President</b>	Joanna McCulloch
<b>Vice President / Education Officer</b>	Cheryl Moore
<b>Treasurer</b>	Sandie Smithers
<b>Secretary</b>	Narelle Hillman
<b>Membership Secretary / Website</b>	Clare Hafner
<b>Communication Officer /</b>	Jenny Keller
<b>Committee Mentor</b>	
<b>Committee Members</b>	Julie Bleasdale Suzanne Clifton Bernie Hanratty Gabriela Kalofonos Lesley McDowell

As AONA NSW members will know, that over the last few years the State AONA branch coordinates their annual conference to be in conjunction with RANZCO (2017 Perth WA, 2018 Adelaide, SA and 2019 Sydney, NSW). Therefore, AONA NSW 37th Annual Conference "Ophthalmic Nursing: Training to build a better future" will be held on November 9, 2019 at the ICC, Darling Harbour, Sydney.

Register NOW! on our webpage [www.aonansw.org.au](http://www.aonansw.org.au), the program summary is also available for you to view.

The organising committee has worked hard to have local, national and international speakers at the event. The Keynote Speaker is the UK RN of the year, who bravely took a review of an ophthalmic service and redesigned this service, to be both personfocused and cost effective and efficient. We look forward to her presentation.

All Ophthalmic Nurses are welcome to register for this conference. It will be an excellent opportunity to network with ophthalmic nurses nationally and internationally with an additional opportunity to share educational and training ideas at our after conference drinks and networking event. We look forward to seeing you there.

# AONAQ

## President's Report Pene Gill

It's been a busy time for AONA in Queensland. On Saturday 17th August we held our 31st AONAQ Annual Conference at the Brisbane Conference and Exhibition Centre. It's hard to believe that we are only a year away from 2020. As I mentioned in my report that morning, when I was a child many believed that we would now be getting around in spaceships! Well that certainly hasn't happened, however we continue to advance and improve the way we deliver ophthalmic care. This was definitely evident in the wonderful presentations provided to our delegates on the day.

This year we were pleased to invite an overseas speaker to present and he did not disappoint. Mr Adam Mapani works at Moorfields Eye Hospital in London. Adam's ophthalmic nursing credentials are impressive, including some prestigious awards he's gained in the UK Ophthalmic world. Definitely an inspiration to our profession. He provided two presentations, these being on Advanced Practice in the UK and the Moorfields Eye Hospital IVT Project. They've certainly come a long way with nurse led clinics. After talking with fellow members, it's amazing how many of us have worked at Moorfields Eye Hospital. Some of us at the same time. It was definitely where I first found my interest in Ophthalmology!

One of our colleagues on the Sunshine Coast Mr Mark Crocker, has been working on an Interventional Ophthalmic CNC Project for over six months. He gave us an overview of what was involved – we look forward to seeing how this project progresses.

Other presentation on the day included Infection Control, Oculoplastics, Retinal Emergencies, Cornea and Ocular Oncology.

However, I think all the delegates will agree that there wasn't a dry eye after hearing the story of a survivor of Ocular Melanoma. Mr Steven Thornton bravely gave us his perspective on the disease. He also has a Facebook page you can follow – Walking the Plank.

We were pleased to provide all delegates with a hard copy of the National Practice Standards for Ophthalmic Nurses. Amanda Wylie gave us a brief update on these and the Cataract Care Standard, which is expected to be released by the Australian Commission for Safety and Quality in Healthcare later in the year.

Another highlight of the day was the presentation of Life Membership to Sharon O'Toole, who has contributed to ophthalmic nursing as a clinician for the last 30 year. Sharon's other accomplishments have been as an AONA Qld Committee Member and as a conference presenter, in Queensland and beyond. Once again, we offer our thanks and congratulations to Sharon.

During the conference our AGM was held. We were happy to accept two new members to the committee- Fiona Turner and Jiorgia Collingridge. We look forward to their contributions. We said goodbye to our Membership Secretary Barbara Ratcliffe this year. Amanda Boveinis will take over this role.

Thank you to our Conference Convenor Carmen Newman and the Committee for making this day possible for our members. Thank you to our Sponsors for their ongoing support.

Next year Brisbane will host the National RANZCO Scientific Symposium in November. AONA Qld will hold our end of year Clinical Meeting to coincide with the RANZCO meeting. This means our educational events will be a little different in 2020 to support this. Keep an eye on the AONA Qld website for more details.

Likewise, details of our final Clinical Meeting for 2019 will appear on the website soon. We look forward to seeing you there!

# WHERE ARE ALL THE NURSES?

Amanda Wylie, Chair AONA National Council

## Where are all the nurses?

It's a common conversation in workplaces, especially in specialty practice like ophthalmology. Where are all the nurses? This article takes a brief look at some of the current nursing workforce issues.

The healthcare sector is one of Australia's largest and fastest growing industries. It directly employs 8% of the Australian workforce. Australia's ageing population is driving growth across the healthcare sector. In some cases—most notably nursing—recruitment of increasing numbers of workers is proving difficult. The situation is set to get worse with the aging nursing workforce in Australia.

## Workforce characteristics of all employed nurses (including Midwives)

Workforce characteristic	2007	2008	2009	2012
Headcount	263,331	269,909	276,751	290,144
FTE nurses	230,762	237,520	242,521	255,174
FTE per 100k population	1,095.1	1,103.5	1,104.1	1,123.6
Male proportion	9.6	9.5	9.6	10.2
Average age (years)	43.7	44.1	44.3	44.6
Proportion aged 55+ (%)	33.0	35.1	36.3	39.1

Full-time equivalent (FTE) based on 38 hour week.

Source: AIHW nursing and midwifery labour force series 2007 to 2009. NHWDS nurses and midwives 2012.

Nurses account for around 30% of healthcare job postings. Nursing in Australia faces severe shortages, with employers struggling to find suitable candidates. Health Workforce Australia predicts that by 2025, there will be a shortage of 109,000 nurses in Australia.

In this climate you would be forgiven for thinking that graduates from nursing programs would be in high demand, yet new nurses struggle to find employment at the completion of their education. It seems the nursing shortfall does not automatically translate to more positions created.

Each year about 8,000 Australian students graduate with a nursing qualification, but there are around 3,000 nurses who cannot find work. In 2019 70 per cent of applicants for graduate jobs in WA public hospitals missed out, with 2127 applications for just 721 registered nurse, enrolled nurse and midwife graduate positions. This situation is similar in the other States.

Universities defend their enrolment numbers, warning of a looming nurse shortage across Australia and calling on governments to introduce longer term workforce planning policies. When considering the link between unemployed graduates and nursing demand, the cause and effect often difficult to separate. A look at data by the Nursing Workforce Sustainability report reveals some clear messages:

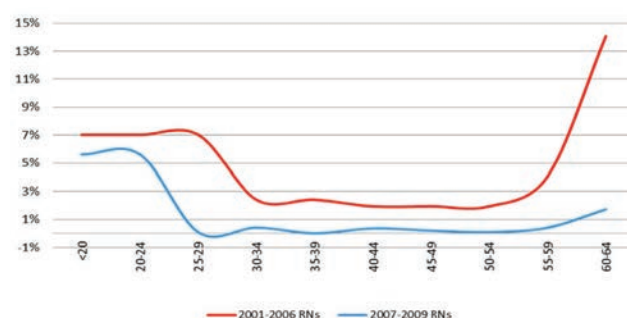
- There are currently insufficient employment opportunities for newly graduating nurses.
- In the future a significant shortfall in nurses will emerge due to an ageing workforce, poor retention rates and population health trends.
- Some areas of nursing are particularly at risk in terms of supply, including aged care and mental health.

It seems that students, hospitals, governments or even nurses themselves aren't hearing these messages.

Poor retention of nurses within organisations compounds the workforce issues, with around 6% of nurses leaving the profession each year. Attrition seems to be concentrated in the younger and older age groups. While some of these can be attributed to retirement, many early career nurses are also leaving the profession. This is often due to workplace stress, lack of support and (ultimately) burnout.

## Registered Nurse Exit Rates 2001-2006 and 2007-09 by Age.

Source: Australian Institute of Health and Welfare Nursing and Midwifery Labour Force Survey, 2001 to 2009



## What can we do?

We have an aging nursing and midwifery workforce. As these highly experienced individuals start transitioning towards retirement, we need to be creating opportunities for nurse graduates to work and learn side by side with them and in time, replace them.

Mentoring young nurses is vital. The old saying, 'nurses eat their young' is echoed through university halls. When precepting or providing clinical supervision for a nursing student or graduate nurse, remember that this is a chance to make them feel valued through encouraging feedback. It is also an opportunity to showcase our specialist area of practice and promote it to the young nurses of the future.

The AONA National Council continues to discuss ways to engage early career nurses in our specialty. Strategies so far have included State groups offering 12 months free membership to early career nurses or offering free registration to meetings and conferences. If you have an idea on how to further this project please let us know at [secretary@aonanc.com.au](mailto:secretary@aonanc.com.au).

# AONAWA

## President's Report Andrea Montague

September already!

AONAWA have had a busy and productive year and are now planning our Sundowner to celebrate the end of another year of networking and knowledge within our chosen field.

In conjunction with Ocular Trauma Seminar on Saturday 7 September we held our AGM where I got to express my gratitude to the hard-working committee who make AONAWA so dynamic and enjoyable. Our shared vision and goals, both long and short term, seem to be coming together. Although we weren't inundated with nominations for committee positions, I think we have mostly filled executive positions and have some new members who are welcomed with great enthusiasm. They are our future and we envision our work will continue to deliver the content that our members expect and enjoy.

Our Seminar speakers were Registrars Verity Moynihan and Ella Suo who were both excellent, talking about Anterior Segment

Trauma and Retinal Detachment. Following this an extremely entertaining talk from Nurse Practitioner Michelle Carberry. Michelle talked us through the nursing assessment and treatment of common ophthalmology cases in the ED and inspired us with her breadth of skills and showed lots of gruesome photos (always a crowd pleaser). At the end of her talk she asked "How do ophthalmic nurses feel about Nurse Practitioners? Is it something you see yourself doing?" I couldn't have scripted it better! Exactly the conversation we should be having.

Vicki Drury was in attendance and provided an update on the ongoing push for training to allow nurses to give intravitreal injections. With the recent news of the Medicare review taskforce recommending significant changes to the rebates and classification of IVI this is more than ever a key area for ophthalmic nurses to keep an eye on (pardon the pun). Its effect on patient and public sector costs means there is much to think about here for our nursing cohort and the wider community.

# AUSCRS CONFERENCE, QUEENSTOWN

## Member Report: Janet Storta Mater Eye Hospital, Brisbane AONAQ

Many thanks to AONA Qld for assisting Anna Horniak and myself in attending the Australian Cataract and Refractive Surgery (AUSCRS) Conference in Queenstown on July 17-20. We are Eye Clinic nurses at the Mater Hospital Brisbane, and we enjoyed the Conference immensely.

The Conference was divided into two streams, one for support staff and the other for medical practitioners with many sessions combined. We were enlightened by the international speakers and their passion for their patients to achieve the best possible visual outcomes. Interestingly the surgeons were keen to share their differing surgical techniques with the audience. The sessions were themed eg: toric lens implantation, small aperture optics, comparison of lenses, trends in refractive surgery, ocular surface disease and cataracts.

We also attended the Zeiss presentation on IOL Master 700, which we have just purchased at the Mater Eye Clinic. This was interactive and very informative. One of Mater Hospital Surgeons, Dr Graham Lee, also presented a session on the management of early PC rupture.

The 3-day Conference ended in a Lord of the Rings Dinner, with everyone participating in costume. We were bused to the AJ Hackett Bungy Jumping Centre and entertained, wine and dined. What a wonderful end to a fantastic conference.

Members of AONA Qld are reminded that Education Grants are available. Details and application forms are available at [aona.org.au](http://aona.org.au).



# AONAVIC

## President's Report Andrea Montague

With our 2019 Conference done and dusted, it is smooth sailing from here until the end of the year for AONAVIC. Before then, we would like to share with you some up-dates from our jurisdiction.

**Clinical Events:** Our August Adelaide and Hobart events went off without a hitch, and we were thrilled to see both events with strong attendance. We also welcomed new members to the events. From here, we will be hosting another event for Adelaide and Melbourne before the end of the year. Our next Tasmanian event will be announced early in the new year.

**Conference:** We'd like to thank our sponsors, members, interstate and international guest speakers and delegates for helping to make our 2019 Melbourne State Conference warm, welcoming and inclusive for all. We are thrilled to receive positive feedback from delegates, who forged new networks and opportunities, and participated in constructive positive discussion.

It was wonderful to witness an increased optimism and interest in collaboration and examination of practice, across the Australian Ophthalmic Nursing Community, and across the seas. We are thrilled that we had a conference with 95% nurse led content, a diverse range of content that showcased how nurses are making a difference in eye care, and opened up the concept of how nurses can continue to support eye care in years to come. Finally, we'd also like to thank our local hosts the Royal Victorian Eye and Ear Hospital and the Centre for Eye Research Australia for welcoming our out-of-State guests to a visitor event the evening before the conference, where they offered a tour of their facilities.

**Grant Recipient:** We congratulate member Elise Chick, from the Royal Victorian Eye and Ear Hospital in Melbourne, on receiving an AONAVIC Grant this year. Elise will be using her travel grant to travel to Tanzania in October to co-Represent the Global Ophthalmic Nursing Community, and Australian Nurses, alongside a UK representative from the European Society of Ophthalmic Nurses and Technicians and a nurse from the Tanzania Ministry of Health, at the International Agency (IAPB) for the Prevention of Blindness, Council of Members Meeting. This is the first time the IAPB will have a nurse led program within their event. Elise's work will help pave the way for the IAPB global ophthalmic nursing forum scheduled for Singapore in 2020. We look forward to hearing from Elise on her return. We also take this opportunity to remind all members that we have grants available for nurses interested in attending related events outside of our jurisdiction, or those seeking to commence research projects or complete course work. Please contact AONAVIC for further information.

**Administrator:** Due to the volume of behind the scenes



*Mele Vuka (Tonga Rep FHFNZ). Heather Machin (Global Lead) Sue Raynel (NZ lead) Lynne Hadley (IAPB) Losana Vola Fiji (Representing PacEyes) discuss IAPB.*

requirements of all Associations, AONAVIC has taken a bold decision to engage an external administrator. This will alleviate our Committee from having to complete administrative tasks and ensure we are meeting our legal obligations. This will also free up our Committee, allowing them to concentrate on advancing ophthalmic nursing through project development and member and community engagement. While it will take a few months to orientate the new Administrator (who will work on an adhoc. basis at first), we are confident in the long-term value this will bring to the Association. The Administrator will commence by working with our President, Treasurer, Media Secretary and external Book Keeper, helping to improve scheduling, communications, billing and our online presence.

Finally, I have stepped down as President after 3 years in order to complete my PhD and continue on as the Global Lead for the 2020 IAPB Nursing Forum and networking activities. I will remain on the committee as Treasurer, making sure our systems remain stable and we continue to support our administrative growth. It has been a true honour helping prepare AONAVIC for 2020 and beyond over these 3 years. I'd like to thank all our members, our fabulous volunteer committee and partners for their support and I look forward to supporting the new Committee into 2019-2020.

# LITERATURE CRITIQUE

## Microbial contamination of multi-use eye drops

Elizabeth Oakley

### Abstract

Multi-use eye drops may be a risk factor for ocular infections either in the home, outpatient clinic or on the hospital ward. This literature critique is to look into the safety of multi-use eye drops on multiple patients and to establish a best practice for disposal dates of these medications. This will also highlight the most prominent organisms found growing on these medications and if there are any common instigators relating to contamination. Does a trend reveal that particular influences like untrained staff are associated more with the contamination of eye drops? What we can do to reduce these risks?

### Introduction

Ocular eye drops are the main form of treatment for multiply eye conditions and are used for diagnostic purpose. In private clinics & outpatient clinics it is common to find organisations utilizing multiple dose eye drops on multiple patients as it is much more cost effective than using single use drops on every patient, but at what risk to the patients? In some clinics its common practice to use the single-dose eye drops on multiple patient, what are the risk associated to these patients? Most ophthalmic solutions are required according to the drug manufactures to be stored between 2-8 deg C, regardless if they have preservatives in them or not. A majority of ophthalmic practices keep the eye drops at room temperature for convenience. Does this have any connection to contamination of eye drops and the risk of infection? Are there other common instigators to contamination of the drops like the person administering the drops and their level of training whether it be a nurse, doctor, care giver or the patient themselves. Does their level of education on protocols on how to administer drops safely and correctly affect the contamination rates?

The result of this critique will drive new policies and procedures for safe use of medications in the future within a small private clinic and reduce the risk of infection.

### Key Words

Contamination, eye drops, microbial, multi-use, bacterial, ophthalmic solutions, preservatives, Minims Preservative-free

### Methods

PubMed, BMJ, Medline and Ovid databases were used for a comprehensive literature search. Every effort was made to use references with in the last 5 years. I have however included up to 15 years, two articles from 2004 and two articles from 2007, due to the lack of more recent and suitable articles found within the last five years. Irrespective of the year of publication all articles were deemed appropriate and all sources were peer reviewed. Some articles used observation study, cross-sectional study and descriptive study.

A systematic literature review was conducted using a cause and effect organisational pattern. All studies were required to check microbial states of ophthalmic solutions in two areas, the dropper tip, the cap and residual solution in each bottle, this check was to done at least once but preference was made to multiple time interval studies. Reports were excluded that were over 15 years and related to ophthalmic solutions that were prepared instead of produced by manufacture.

### Results

This has been broken up into have two headings for easy analysis. Research suggests a great variance in results when looking at eye drop contamination,. Contamination results start from 0.07% and go up to as high as 70% according to Teuchner, Wagner, Bechrakis, Orth-Höller, and Nagl (2015). In the studies I have reviewed only one study, by Hassens et al. (2018) showed that none of their vials were contaminated throughout their 7-month study. On the other end of the scale there was one study that indicated up to 70% of their vials were contaminated after 4 weeks (Fazeli, Behesht, Nejad, Mehrgan, and Elahian, 2004). This concurs with other research.

### Preservatives

Drug manufactures recommended shelf life after opening eye drops; that those which contain preservatives 28 days and only single use for those without preservatives. Preservatives are used to prevent the growth of microorganisms within the solution and thus extend the usage time of these solutions. It's been stated that these guidelines go back to 1966 to the British Pharmaceutical Codex (Hanssens et al., 2018). Most ophthalmic sterile solutions contain preservatives to prevent microbial growth and reduce infection rates. There are single use solutions available that are preservative free however these are a lot more expensive than the preservative multi-dose solutions. Somner et al. (2010) conducted a study on Minims single dose preservative free eye drops this



revealed that using one minimis vial per patient on both eyes increased the contamination rate to 5% in comparison to using it on just one eye.

In all the literature I reviewed there is a varying degree of recommendations for the disposal timeframe of preservative eye drops after opening them, starting from 1 day to up to 1 month. In one study conducted by optometry students whom used the same bottle of eye drops over a 7 month period, found that none of the eye drops had fungal or bacterial contamination (Hanssens et al., 2018). This 0% result could be due to the students having to keep an accurate record if they contaminated the eye drops by touching the tip or the cap making them more cautious in instilling the drops.

The most common preservative used in eye drops is benzalkonium chloride, chlorbutanol and phenylmercuric nitrate as found in a study in Kenya (Nentwich, Kollmann, Meshack, Ilako, and Schaller, 2007). Other studies showed the main preservative found in the eye drops they used during their study contained benzalkonium chloride. In Bachewar, Deshmukh, Choudhari, and Joshi (2018) study of 55 eye drops 41 of those contained benzalkonium chloride and 5 contained chlorbutanol preservative.

In Teuchner et al. (2015) study, 17% of eye drops from the outpatient clinic and 20% from the hospital ward showed contamination. 3% of these were contaminated at the dropper tip only, 11% were the drops and 7% were residual content only (Teuchner et al., 2015). Nentwich et al. (2007) study, found that 7% of 101 eye drops were contaminated, 6% at the dropper tip and 1% from the drop. A similar result was found in another study were 37 multiuse eye drops were tested after 7 days and found 11% to be contaminated, but all contamination was found at dropper tip only (Tsegaw, Tsegaw, Abula, and Assefa, 2017).

Walsh, Zaidman, Geliebter and Gould's (2008) study, had a higher contamination rate of 23% out of 47 eye drops were contaminated, but it did not state in what time frame. All bottles were contaminated at dropper tip only. In Bachewar et al. (2018) study,

this demonstrated a slightly higher percentage of contaminated drops up to 26% of the 55 eye drops were contaminated but with no correlation to the duration of usages as after 1 week only 2% contaminated 2 weeks 15%, 3 weeks 7%, 4 weeks 2% and greater than 4 weeks no contamination was found. Week two showed the highest contamination rates with unknown causes. The highest rates of contamination are seen in the study by Fazeli et al. (2004), a total of 4 groups of 50 eye drops in each group from an outpatients department were used and tested for contamination at different intervals. This showed that at eye drops after 1 day, 44% were contamination and after 2 days 54%, 4 days after 60% and 7 days after 70% of eye drops were found contaminated. They found that 32% of the caps and 50% of the solution out of 200 bottles had been contaminated.

Bechewar et al. (2018), predicted that failure to educate individuals on proper precautions and instillation process of eye drops; is a cause for microbial contamination as this is generally results from contact with bottle and the patients eyelashes, lids, conjunctiva or instillers fingers. Only a few studies associated contamination with the person instilling the drops. One study found that a single ophthalmologist was linked to an outbreak of adenovirus due to multi-dose dilating drops (Muller, Siddiqui, Ivancic & Wong, 2018) Teuchner et al. (2015) study indicated that patients are more likely to contaminate their own drops than medical staff, 24% of patients self-administering had contaminated drops in comparison to 17% administered by medical staff.

#### Common organisms found

Most organisms found were normal commensal flora that is found on eyelids lashes and conjunctiva.

The World Health Organisation (as cited by Jalali, Zinolabedini, Moradi, and Dibazar, 2004) stated that pseudomonas aeruginosa contaminated 3% of 1220 opened eye drops, but in their own study only 1 eye drop out of 97 was contaminated with pseudomonas aeruginosa and 3 eye drops were contaminated with staphylococcus aureus.

Table 1 microorganisms that were found on contaminated eye drops in multiple studies

Contaminated Organisms	Individual Study's % of contamination (not recorded indicated as /)				
	Teuchner et al. (2015)	Fazeli et al. (2004)	Jalali et al. (2004)	Bachewar et al. (2018)	Nentwich et al. (2007)
Pseudomonas aeruginosa	/	/	25%	1.81%	/
Staphylococcus aureus	17.42%	8.5%	75%	9.9%	/
Staphylococcus epidermidis	/	29.5%	/	/	1%
Micrococcus	5.36%	13.5%	/	/	2%
Bacillus	13.4%	16%	/	1.81%	1%
E. Coli	/	/	/	10.9%	/

### Future Research Required

None of these studies looked into temperature control to see if it was a possible cause for contamination. Most hospitals and clinics leave their eye drops at room temperature for easy access even though the manufacturers' guidelines may indicate that they should be kept in the fridge under 8 deg C. Further research is required to look into the effects on contamination rates for multi-use drops with and without preservatives at different time intervals and the temperature at which the eye drops were stored. As an example, one group's eye drops studied at room temperature and the second group eye drops kept in the fridge at 2-8 deg C and then checked for contamination after 1day, 2days, 4days, 1week, 2 weeks. Only one of these studies directly linked to contaminated eye drops to eye infections. Further research is required to ascertain the percentage of the contaminated drops that directly relate to the cause of ocular infections.

### **Conclusion**

Only one study found 0% contamination rates over an extended period however this study was conducted by students whom were very careful and used all precautions against contaminating the eye drops. This could link into the importance of education to individuals administering eye drops appropriately to avoid contamination. All the other studies showed varying percentages of contamination from 2%- 70% which is the same variance found in other literature. Multiple studies indicated that after 4 weeks

contamination rates decrease to 0%. This may indicate that the preservatives are more effective after 4 weeks instead of becoming less effective more research needs to be done into more effective preservatives. The median percentage of these studies on contamination is 20%, if this is a true reflection on the risks of all eye drops being contaminated after use from 1 to 2 weeks after opening is still high. The risk to causing ocular infection is presumed by these contaminated drops, however this is uncertain due to lack of research connecting these studies to individuals and the percentage of them that acquired an ocular infection. As contamination rates are high on multi-use eye drops and the single-dose eye drops used on multiple eyes, ideally single dose Minims should be used one for each eye. However this is not very cost effective as they are expensive. As an alternative multi-use eye drops should only be used with appropriate precautions ensuring proper hand hygiene, drop instillation without making contact to eyelashes, lids, conjunctiva or touching the dropper tip. Care needs to be taken with the bottles cap to ensure not contact to the rim. Eye drops should be disposed of immediately if any contact is made to the dropper or the cap. If patient is suspected of having an infection, single dose eye drops should be used and discarded immediately after for each eye. Otherwise I conclude that multi-dose drops should be discarded after 5 days, if all proper precautions are taken.

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Ophthalmic Nursing:  
Training for a Better Future

Australian Ophthalmic  
Nurses Association NSW  
Conference 2019

Sat. 09 November 2019

International Convention  
Centre, Darling Harbour  
Sydney Australia

Register at [aonansw.org.au](http://aonansw.org.au)

AONA NSW invites you to submit an abstract for a Presentation, Poster or Education Leaflet for the upcoming Conference on 9th November, 2019. AONA NSW is willing to assist you with your presentation, so please talk to us about your ideas.

There will be three types of presentation avenues at the conference:

- 1 — Spoken presentation 10-20 minutes
- 2 — Standard Poster with or without presentation (61 x 91 cm)
- 3 — A4 Patient or Staff Education Leaflet

Please notify us of your interest via email, phone or text:

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# CALL FOR ABSTRACTS

