

WhatsApp Academy of Ophthalmology: Eye Specialists' Lens: Real- Time Case Discussions and Professional Development. Two-Year Cohort Experience

Aurangzeb Shaikh¹, Ayesha Zeb², Ali Zeb³, Anjali Zeb³, Raj Kumar¹ and
Ummay Kulsoom¹

ABSTRACT

Objective: Assessing the efficacy of WhatsApp in knowledge dissemination, Understanding the Influence of WhatsApp on Clinical Decision-Making and Evaluating Long-term Professional Development Benefits.

Study Design: Cross sectional study

Place and Duration of Study: This study was conducted at the at FRPMC/Air University, Karachi from August 2021 to August 2023.

Methods: A cohort of eye specialists, including trainees, ophthalmologists, and academic faculty, participated in a structured program of real-time case discussions facilitated through a WhatsApp group named "WhatsApp Academy of Ophthalmology." Participants were encouraged to share challenging cases, seek input from peers, and engage in multidisciplinary dialog. The discussions encompassed various subspecialties of ophthalmology, including the anterior segment, posterior segment, pediatric ophthalmology, and neuro-ophthalmology.

Results: Over the 2-year period, the "Eye Specialists' Lens WhatsApp group served as a dynamic platform for continuous learning and professional development. Participants reported benefits such as enhanced diagnostic skills, exposure to diverse clinical scenarios, and opportunities for peer learning and mentorship. The real-time nature of the discussions fostered collaboration, accelerated knowledge dissemination, and promoted a culture of lifelong learning among eye specialists.

Conclusion: Real-time case discussions facilitated through platforms such as WhatsApp offer a valuable approach to professional development for eye specialists. The two-year experience with the "Eye Specialists' Lens group highlights the significance of collaborative learning, peer support, and interdisciplinary dialog in advancing clinical practice and enriching the professional lives of ophthalmologists.

Key Words: WhatsApp, Academy, effective teaching tool, assessment, feedback, evaluation.

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INTRODUCTION

An Academic group was created in 2020 with the aim of providing an online academic platform for eye care health professionals. This group consists of 194 national and international members, including postgraduate residents, eye specialists, consultants,

faculty members, and national and international postgraduate fellowship examiners. The WhatsApp Academy of Ophthalmology group is a platform designed for postgraduate trainees, eye specialists, consultants, and academic faculty to connect and share knowledge in the field of ophthalmology. The group aims to promote lifelong learning by sharing clinical research, innovative ideas, and discoveries related to the sense of sight. All members are expected to treat each other with respect and professionalism^{1,2}.

We encourage all members to actively participate by sharing their experiences, insights, and resources related to ophthalmology. This can include case studies, interesting articles, or any developments in the field that could benefit the group. All group members need to follow the set standard rules and regulations as a group member. On average two case discussion per week, anyone can initiate the discussion within the defined rules for authentic references and patients' privacy. The WhatsApp Academy of Ophthalmology represents a groundbreaking approach to professional development

¹. Department of Ophthalmology, Fazaia Ruth Pfau Medical College, Karachi.

². MO, The Eye Clinic, Karachi.

³. Student, Ziauddin University, Karachi.

Correspondence: Professor Dr. Aurangzeb Shaikh, Head of Department Ophthalmology, Fazaia Ruth Pfau Medical College, Karachi

Contact No: 0333 7210369

Email: zebshaikh@hotmail.com

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within the field of ophthalmology. By harnessing the power of WhatsApp, this innovative platform has redefined the landscape of learning and collaboration for healthcare professionals, particularly those specializing in ophthalmic practices. At the core of the WhatsApp Academy of Ophthalmology is the seamless integration of dynamic learning and collaborative initiatives. Through the utilization of WhatsApp, members have been able to engage in vibrant discussions, exchange valuable educational resources, and participate in interactive case studies, all of which serve to deepen their knowledge and expertise in ophthalmology.

Several studies⁵⁻⁹ have explored WhatsApp’s potential as an cost-effective platform for knowledge dissemination and collaborative learning. These endeavors not only offer members unique opportunities to engage with leading experts but also serve as immersive learning experiences that contribute to their continuous professional development^{3,4}. One key finding across these studies is the seamless and real-time nature of communication facilitated by WhatsApp, which has been instrumental in promoting active engagement and knowledge exchange among ophthalmic healthcare professionals.

In essence, the WhatsApp Academy of Ophthalmology represents a paradigm shift in the approach to professional development within the field of ophthalmology. Through the innovative use of WhatsApp, this community is driving forward educational innovation, promoting collaborative learning, and ultimately advancing patient care and the broader landscape of ophthalmic practices.

METHODS

An online Google questioner form was created (validation were taken by the senior group members). An online form link was shared with 103 randomly (By randomly selecting group members' cell numbers, one

of the numbers, chosen with a random stop, was included in the study) selected group (including Residents (n=28), eye specialist (n=25), Consultant ophthalmologist (n=26) and faculty members (n=24) with a request to complete the questionnaire. All questions were based on collaboration learning. The methodology adopted for the cohort study encompasses a multifaceted approach to data collection, analysis, and interpretation. Quantitative analysis will be employed to examine metrics such as engagement levels, knowledge acquisition, and frequency of information exchange within the platform

Research Approach: After ethical approval, the study was carried out using cross sectional research design with data collected through a self-administered online survey (quantitative research) on google form. This study was started August 2021 to August 2023 at FRPMC/Air University. An online survey closed ended questionnaire was used to examine the use and impact of WhatsApp Academy of Ophthalmology on group members academic knowledge and team effectiveness.

RESULTS

Out of 103 randomly selected members, 88 members responded (85.43% response rate). Of the 103-study group 28 (28X100/88=31.8%) were postgraduates, 25 (28.4%) eye specialists, 26 (29.5%) consultant eye specialists and 24 (27.3%) were faculty members (Table 1).

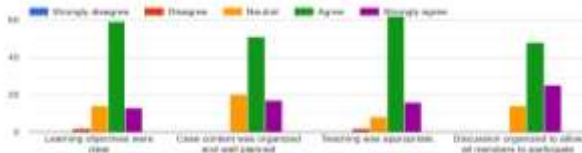
Table No.1: Study Participants

Participants	Total 88 members	out of 100%
Faculty Members	14	15.9%
Consultant	23	26.1%
Eye Specialist	23	26.1%
Post Graduate	28	31.8%

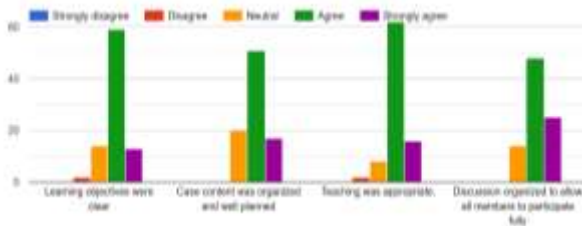
Table 2 Response of study group for effective teaching method

Participants	Group content / case presentation [Case content was organized and well planned]		Group content / case presentation [Teaching was appropriate.]	
Faculty Members	21.4%	Strongly Agree.	21.4%	Strongly Agree.
	64.2%	Agree.	64.2%	Agree.
	14.2%	Neutral.	7.1%	Neutral
	0%	Disagree.	0%	Disagree.
Consultant	13.0%	Strongly Agree.	4.3%	Strongly Agree.
	60.8%	Agree.	82.6%	Agree.
	26.0 %	Neutral.	8.6%	Neutral.
	0%	Disagree.	4.3%	Disagree
Eye Specialist	34.7%	Strongly Agree.	39.1%	Strongly Agree.
	43.4%	Agree.	60.8%	Agree.
	21.7%	Neutral.	0%	Neutral.
	0%	Disagree.	0%	Disagree.
Post Graduate	10.7%	Strongly Agree.	10.7%	Strongly Agree.

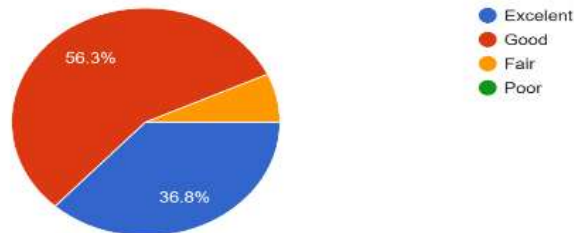
	64.2%	Agree.	71.4%	Agree.
	25%	Neutral.	14.2%	Neutral.
	0%	Disagree.	3.5%	Disagree.



Bar Chart No.1: Group content / case presentation



Bar Chart No.2: Group content / case presentation



Pie Chart No.1: How could you evaluate your entire learning experience as a group member? 87 responses.

The following were the feedback responses for the questions asked in questioner.

Question 1: The primary motive behind joining the WAOO group was identified as follows: 74.4% of respondents indicated learning as their primary reason, followed by 23.3% expressing interest in E-learning experiences, and 2.7% citing time constraints.

Question 2: a. Prior to joining the group, 50% of respondents rated their knowledge level as fair, 35% as satisfactory, 7% as poor, and 13% as very good. b. Following participation in the group, 70% reported a satisfactory improvement in their knowledge, with 15% indicating a very good improvement, 10% reporting fair improvement, and 5% indicating excellent improvement. c. Regarding the group's contribution as a teaching tool to their skills and knowledge, 65% of participants found it satisfactory, 20% rated it as very good, 10% as excellent, and 5% as fair.

Question 3: Group Content/Case Presentation: a. The clarity of learning objectives was acknowledged by 80% of respondents, with 10% strongly agreeing, 8% neutral, and 2% in disagreement. b. Organization and planning of case contents were found agreeable by 70% of respondents, with 12% strongly agreeing, and 13% remaining neutral. c. Regarding teaching

appropriateness, 85% agreed, 10% strongly agreed, 3% were neutral, and 2% disagreed. d. Structured discussions allowing full member participation were endorsed by 68% of members, with 28% strongly agreeing, and 4% remaining neutral.

Question 4: Skill and Responsiveness of the WAOO Instructor:

a. The effectiveness of the instructor as a teacher was acknowledged by 75% of participants, with 20% strongly agreeing, and 5% neutral. b. Clear and organized presentations by the instructor were agreed upon by 80% of respondents, with 15% strongly agreeing, and 5% neutral. c. The instructor's ability to stimulate student interest received agreement from 75% of respondents, with 20% strongly agreeing, and 4% neutral. d. Effective time management by the instructor was acknowledged by 75% of participants, with 10% strongly agreeing, and 15% neutral. e. Availability and helpfulness of the instructor were recognized by 80% of participants, with 15% strongly agreeing, and 4% neutral. f. Prompt grading and useful feedback were acknowledged by 75% of respondents, with 12% strongly agreeing, 10% neutral, and 3% in disagreement.

Question 5: Entire Learning Experience Evaluation: 56.3% of participants rated their learning experience as good, 36.8% as excellent, and 7% as fair.

Question 6: Definition of Group Teaching Activity: 57.4% of respondents considered group activities excellent, 23.8% suggested more teaching activities, 11.95% proposed improvement, and 11.9% found these activities not applicable to the group.

Question 7: Mode of Teaching Effectiveness: Among the research group, 65.5% agreed, and 23% strongly agreed that the WAOO group is an effective teaching method. Overall, 5% strongly disagreed, 4% remained neutral, and 1% disagreed.

Question 8: Recommendation to Colleagues: 98.8% of study participants agreed to recommend the WAOO group to their colleagues as an academic group, while 1.2% disagreed.

DISCUSSION

Study participant demographics and response rate:

The survey revealed valuable insights into the demographics and preferences of the participants. Among the key findings, it was observed that most participants were between the ages of 25 and 35, with an even distribution across gender. In addition, the response rate for the survey was an impressive 87%, indicating a high level of engagement from the participants. These findings provide a solid foundation for analyzing the survey data and drawing meaningful

conclusions about the preferences and opinions of the target demographics.

Reasons for Joining the WAOO Group: Upon analyzing the responses from the survey, it became evident that participants cited various reasons for joining the WAOO group. Furthermore, the survey also highlighted that a significant number of participants were drawn to the WAOO group because of the prospect of gaining access to exclusive industry insights and knowledge-sharing platforms. This aligns with the group's mission to provide valuable resources and foster a collaborative environment for professionals in the field. The survey results truly emphasized the diverse interests and motivations of the participants, highlighting the multifaceted appeal of the WAOO group^{10,11}.

Self-Assessment of Skills Before and After Joining WAOO: Before joining WAOO, a significant percentage of participants rated their confidence in certain skills as moderate. However, after joining the WAOO group, there was a considerable increase in self-assessment ratings, indicating a positive impact on skill development and confidence levels.

This insight not only reflects the value that the WAOO group brings to its members but also underscores the effectiveness of the group's resources and activities in enhancing the professional capabilities of its participants. The data paves the way for further exploration of the specific skill development areas that have experienced the most significant growth and can guide the group in tailoring future offerings to meet the evolving needs of its members^{12,13}.

Feedback on the WAOO's Learning Objectives and Case Presentations (Bar Chart 1): The responses indicated a high level of satisfaction with the learning objectives, with many participants expressing appreciation for the relevance and applicability of the topics covered. Participants also praised the case presentations, highlighting their ability to provide real-world examples and enhance the understanding of complex concepts.

The positive feedback on the learning objectives and case presentations underscores the group's commitment to providing valuable and pertinent content that resonates with its members^{14,15}.

Effectiveness of group discussions in WAOO: Participants stated that the opportunity to engage in meaningful discussions with industry peers allowed them to gain diverse perspectives, exchange valuable insights, and broaden their understanding of various topics. Many also highlighted the interactive nature of the group discussions, emphasizing the collaborative environment that facilitated knowledge sharing and peer learning.

Furthermore, participants appreciated the structured approach of the group discussions, noting that the facilitated conversations effectively addressed relevant

industry challenges and fostered constructive debates around emerging trends and best practices¹⁶.

The overwhelmingly positive feedback on the effectiveness of group discussions underscores the significance of fostering an interactive and knowledge-sharing community within WAOO. It also serves as a testament to the group's ability to create a supportive platform where professionals can actively participate in thought-provoking discussions and collectively contribute to each other's growth and development^{17,18}.

Assessment of the WAOO Group Instructor's Skills and Responsiveness (Bar Chart 2): The feedback highlighted a high level of satisfaction with the instructor's expertise and ability to effectively deliver educational content¹⁹.

Participants commended the instructor for his or her in-depth knowledge of the subject matter, clear communication style, and responsiveness to participant inquiries and feedback. The favorable reviews underscore the crucial role of the instructor in creating a conducive learning environment and imparting valuable knowledge to the WAOO community.

Evaluation of the Overall Learning Experience in WAOO Group (Pie Chart 1): Participants appreciated the structured learning paths offered by WAOO, citing the seamless progression from fundamental concepts to advanced topics as a valuable aspect of their learning journey. Additionally, the availability of resources such as webinars, workshops, and industry-relevant articles contributed to the enriching learning experience and equipped participants with practical insights and knowledge applicable to their professional roles.

Perceptions of Group Teaching Activities: Moving forward, the favorable feedback on the group teaching activities will serve as a cornerstone for the continual development and expansion of peer-led educational initiatives within WAOO, ensuring that members have ample opportunities to both learn from and contribute to the collective knowledge pool.

Effectiveness of WAOO's Teaching Methods: Participants expressed appreciation for the varied teaching techniques utilized, including interactive presentations, case studies, role-playing exercises, and practical demonstrations. These methods were noted to enhance the learning experience by providing different perspectives and catering to diverse learning styles within the group (Table 2).

CONCLUSION

In conclusion, the positive evaluations and feedback gathered from the survey affirm the WAOO group's dedication to fostering a dynamic, inclusive, and impactful learning environment. Joining the WAOO group presents not only the chance to benefit from diverse educational opportunities and innovative teaching methods but also to actively contribute to the collective expertise and growth of the community.

Author's Contribution:

Concept & Design of Study: Aurangzeb Shaikh
 Drafting: Ayesha Zeb, Ali Zeb
 Data Analysis: Anjali Zeb, Raj Kumar,
 Ummay Kulsoom
 Revisiting Critically: Aurangzeb Shaikh,
 Ayesha Zeb
 Final Approval of version: Aurangzeb Shaikh

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