

One-Minute Preceptor (OMP) applied teaching method

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Abstract

This systematic review was conducted by searching English language articles on one-minute preceptor one-minute preceptor (OMP) through five databases, including Web of Science, ProQuest, Scopus, Clinical Key and PubMed for the published articles from 2000 to 2017 using the following search term 'OMP' in titles and abstracts. After employing the exclusion criteria, 31 articles remained for detailed analysis. The main outcomes of the investigated studies were categorised into two main categories, namely: (1) OMP and develop effectiveness and (2) OMP and Traditional Model & SNAPPS. The OMP is simple to remember, easy to learn, learner-centred, improve behaviour and quality of feedback, engage more in getting commitments and apply prompts the concepts and learner's knowledge and satisfaction of learner, and an effective and efficient teaching method. The OMP developed teaching and learning activities, to convert teaching into a conversation, with the thinking work being undertaken by the learner.

Keywords: One-minute preceptor (OMP), systematic review, teaching method.

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1. Introduction

Around previously two decades, clinical preceptors were considered by educational researchers at work and pedagogical behaviours were explained by them (Bowen et al., 2006). One-minute preceptor (OMP) is one of the general teaching models these days which have been addressed in literature. It has been stated that OMP is time efficient and is considered as one of the effective teaching ways (Irby et al., 2004).

The '1 minute' by the name '1-minute preceptor' does not mean a time limitation (Chan et al., 2015), but even this method is useful in short encounters (Chan & Sharma, 2014). The OMP was first introduced by Neher in 1992 (Chan & Wiseman, 2011). This technique was used by busy ambulatory care practitioners for the first time (Chan et al., 2015) as an alternative method to the traditional presenting method (Pascoe et al., 2015). The aim of developing OMP was diagnosing the patient and process of learner's way of thinking simultaneously, also increasing their confidence and satisfaction (Teheranti et al., 2007). It simplifies the presentation of the learner's thought and easily diagnoses the patient and learner (Pascoe et al., 2015). Neher et al. stated that OMP is time efficient and learner-based. It is simple for remembering, applying easily, and also both useful for new information and new ways of thinking.

This simplification is applicable for part-time and junior faculty members who do not have enough experience in teaching (Chan & Sharma, 2014; Chan & Wiseman, 2011). The main benefit of OMP is encouraging learners in solving problems and increasing the foster learner's responsibility and also making sense of learner's feedback and reaction (Chan et al., 2015). The OMP has five stages which are named micro-skills (Chan & Sharma, 2014; Seki et al., 2016): step one (getting a commitment): this skill helps to diagnose the learners' knowledge and encourage them to answer the posed preceptor questions. Therefore, this skill pushes a preceptor to a direction which needs more care (Bowen et al., 2006; Rashid et al., 2017). Step two (investigating for supporting evidence): Before making any judgment regarding the learner's reply, the preceptor should give him the chance to give his reasons about the answer and focus on the right part. This procedure allows the preceptor to determine the capacity of the learner's knowledge and the reasons for the given answer (Chan & Wiseman, 2011).

This micro skill is also diagnosing the tool (Rashid et al., 2017). Step three (teaching a general rule): Preceptor should determine all the gaps in the learner's knowledge and errors by providing an objective language without any subjective judgment (Chan & Wiseman, 2011). Moreover, the preceptor would use the opportunities to teach learners the general rules on clinical diagnosis or management and help them to apply their knowledge to other situations in a specific case. Furthermore, these rules should be general (Chan & Sharma, 2014). Therefore, the aim of teaching rules is to secure the future (Rashid et al., 2017). Step four (strengthening what was done correctly): It makes a positive feedback for learners and having better learning situations, and encourages them to solve the problems, by themselves and affect them to have proper behaviours and competencies (Chan & Sharma, 2014). Then, suggesting the positive feedback lead to make stronger what they did (Rashid et al., 2017). Step five (correcting errors and filling in omissions): The preceptor should use the chance to teach an instruction or key points according to a specific question in hand. Accordingly, if the learner faces any similar situation in the future, she/he can apply the learned knowledge through appropriate teaching (Chan & Wiseman, 2011). Although a positive and proper learning space is very beneficial for learning, all gaps and errors should be corrected without any judgmental language (Chan & Sharma, 2014). Most authors consider this as a thirds step of OMP, but others consider this as a separate step when all the learning issues of the available question have been clear (Chan & Wiseman, 2011). Generally, four explained skills give the pathway to how the preceptor would reply to the learner, prepare clinical teaching and give feedback.

2. Methods

This systematic review was conducted by searching English language articles on OMP. We searched five databases, including Clinical Key, ProQuest, PubMed, Scopus and Web of Science in-process for the published letter to the editor, irrelevant articles with OMP, articles without full paper and duplicate articles were excluded from this study. The search results were 131 articles, after removing irrelevant articles to OMP, articles with no full-text and duplicate text, and 31 articles were considered as final papers. Articles from 2000 to August 2017 using the following search term ‘OMP’ in titles and abstracts.

3. Results

The search process of online databases resulted in 133 articles, including 35 Clinical Key, 3 ProQuest, 31 PubMed, 50 Scopus and 14 Web of Science indexed articles. After the initial screening of titles and abstracts, 42 articles were excluded since the evaluation was not performed on OMP. Moreover, 50 articles were removed due to duplication. Based on the full-text review, 10 articles were excluded as they did not have useful content related to OMP. Therefore, 31 articles remained for the detailed analysis. The commonly used study designs in the order of frequency were opinion review (n = 9), observational studies without a control group (n = 7), non-randomised controlled trial (n = 7), randomised controlled trial (n = 2), systematic review (n = 3), narrative review (n = 1), comparative study (n = 1) and mini review (n = 1). The main outcome measures of the articles were categorised into two main groups. The first group included 24 articles as OMP and develop effectiveness. The second group included seven articles as OMP and Traditional Model and SNAPPS. Table 1 shows a brief summary of different study designs and different outcome groups.

Table 1. Effects of OMP on outcome categories subdivided by quantitative study designs

Outcome category	Study design	Total	Positive effect			Negative effect			Mixed Effect 2	Description
			Demonstrated 3	Statistically sig.	Mix 4	No Effect 1	Demonstrated 5	Statistically sig.		
OMP & develop effectiveness	Systematic review	3	1	–	–	2	–	–	–	The OMP is simple to remember, easy to learn, learner-centred, improve behaviour and quality of feedback, engage more in getting commitments and apply prompts the concepts and learner’s knowledge and satisfaction
	Mini review	1	–	–	–	1	–	–	–	
	RCT	2	–	–	1	–	–	–	1	
	Non RCT	7	–	–	5	–	–	–	2	
	Obs without Ctrl	4	2	–	1	1	–	–	–	
	Opinion review	7	5	–	–	2	–	–	–	

OMP & traditional model & SNAPPS	Comparative study	1	-	-	1	-	-	-	-	-	of learner, effective and efficient teaching method. Using the five steps of the OMP is one approach that can contribute to a successful orientation program. The OMP is more efficient than the traditional model. Traditional approach was more likely to teach generic skills while both SNAPPS and OMP allow preceptors to assess the diagnostic reasoning skills of learners and require a deep understanding of the teaching method. (1) When reported as such by the authors, with or without statistical arguments. (2) Mix of positive, absence of,
	Narrative review	1	-	-	-	1	-	-	-	-	
	Opinion review	2	2	-	-	-	-	-	-	-	
	Obs without Ctrl	3	-	-	3	-	-	-	-	-	
Total	Systematic review	3	1	-	-	2	-	-	-	-	
	Mini review	1	-	-	-	1	-	-	-	-	
	RCT	2	-	-	1	-	-	-	-	1	
	Non RCT	7	-	-	5	-	-	-	2	-	
	Obs without Ctrl	7	2	-	4	1	-	-	-	-	

Comparative study	1	-	-	1	-	-	-	-	-	and negative effects. (3) When the authors report a positive effect but without reporting statistical significance
Narrative review	1	-	-	-	1	-	-	-	-	(4) Mix of statistically significant and demonstrated positive effects. (5) When the authors report a negative effect but without reporting statistical significance
Opinion review	9	7	-	-	2	-	-	-	-	(6) Mix of statistically significant and demonstrated negative effects

4. Discussion

According to the goals and content of the articles, two categories were considered in OMP.

4.1. OMP and develop effectiveness

By the OMP model, learners had a better learning experience and the novice teachers got engaged by more commitments from students. Teachers used their own policy with similar components to OMP through focusing on the learner-based aspect, adapting to students' requirements, applying feedback strategy and increasing teacher immediacy. They do not have a very clear pathway, such as OMP; therefore, they are more mature and flexible (Cayley, 2011; Gallagher et al., 2012). Residents reported that there were no significant improvements in the policy of teachers' behaviour using OMP. Although the OMP did not have an effect on teaching behaviour, researchers believed that OMP had an effect on the quantity and quality of outpatient feedback. The OMP clinical teaching showed modest improvements in the quality of feedback in the ambulatory setting (Salerno et al., 2002). OMP provides an opportunity, which is time-efficient for evaluation and teaching (Rashid et al., 2017).

The OMP developed teaching and learning procedures, which can effectively give clinicians the ability to convert clinical teaching into a conversation with the help of a learner, intern or trainee. Furthermore, it offers both depth and breadth of teaching opportunities for learners. The ar-

range of workshops for clinical preceptors by combining the principles associated with OMP can increase the teaching effectiveness and balance 'getting the job done' with more experience (Eckstrom et al., 2006; Gallagher et al., 2012; Salerno et al., 2002). In this regard, initial planning and emphasising the role of learners in asking them instead of telling can be helpful (Post et al., 2009). The application of OMP improves the way of eliciting medical learner's knowledge and teach them new things since they want to learn and grow more as a clinician and preceptor (Hickie et al., 2016; Jones & Reis, 2010; Vaughan et al., 2015). The application of OMP improves the way of eliciting medical learner's knowledge and teach them new things since they want to learn and grow more as a clinician and preceptor (Jones & Reis, 2010; Hickie et al., 2016; Vaughan et al., 2015). The OMP in a dental clinic setting that increases the learner value and learner interactions. It develops learner's critical thinking and encourages students to use clinical evidence for decision-making on patient care in the clinic (Bott et al., 2011; Sakaguchi, 2010; Weitzel et al., 2012). The single teaching interference can be noticed as a time-efficient, successful and academically sound training policy for the ambulatory constitution. The typical case scenarios indicate that OMP is the most suitable model for the single-user of corridor consultation, whether for diagnosis questions or instituting a therapeutic plan. The ad hoc teaching may provide the best unique training opportunity (Molodysky, 2007). Results indicate that psychiatry residents are not comfortable with the OMP technique in psychiatric structures (Brand et al., 2013; Vaughan et al., 2015).

The five steps of learning in the OMP program persuade asking more questions, making feedback, and proving an option for reflection throughout clinical experience. Learning is relevant to realise and solve clinical issues. Through conversation with the preceptor, the newest learner is more enthusiastic to discuss, analyse and think in another way.

Therefore, it is important to make those preceptors ready with the skills to nurture and develop critical thinking skills among the fresh nurses. Considering all steps, OMP is a bridge to reach a successful orientation program (Kertis, 2007). Learners consider the use of OMP micro-skills in clinical teaching importance and value. They became aware that OMP micro-skills would improve the quality and quantity of teaching, as well as the quality of preceptors in the structured programs. Faculty stated positive attitudes regarding teaching (Ong et al., 2016). The micro-skills of learning seminar transformed a set of well-established teaching principles from a resident to a preceptor (Amorosa et al., 2012). The results demonstrated that the improvement of clinical teaching by a faculty must be a tolerable attempt effort (Ong et al., 2017). Moreover, a number of researchers believe that the OMP model provides little improvements in residents' teaching skill (Furney et al., 2001).

4.2. OMP and traditional model & SNAPPS

Preceptors using OMP through viewing scripted and videotaped teaching encounters were in the same level or higher level than preceptors using a traditional model in terms of the diagnosis of patients, solving medical problems, having higher self-confidence in grading students and rating the encounter more effectively and efficiently (Aagaard et al., 2004; Farrell et al., 2016; Lockspeiser & Kaul, 2015). The OMP is a learner-oriented method that helps to make the learner's learning needs visible for teaching purposes. The OMP is a more effective teaching model in comparison with traditional ones. Learners are satisfied with OMP due to the learner's feedback in the decision-making process. This is done by the first two steps in the OMP method. The utilisation of the OMP method gives preceptors more confidence to rate the learner's knowledge and clinical reasoning skills. This is why preceptors prefer the OMP model to traditional models. For teaching points, preceptors should distinguish the characteristics of the case and address the learner's requirements. Preceptors should be aware that learner's aim regarding teaching points is similar to what they really share, focusing on diagnostic reasoning as well as evaluation and treatment. OMP technique has been delivered teaching points from genetic clinical skills to disease-specific (Bannister et al., 2011; Cayley, 2011; Irby et al., 2004). The OMP and SNAPPS are two strategies that can be applied in office perception to make an improvement in educational processes and outcomes.

The SNAPPS has the following steps: (1) summarise the history and findings briefly, (2) narrow the differences to two or three matters, (3) compare and contrast differences opportunities, (4) probe the preceptor by questions of uncertainty, problems or alternative methods, (5) plan a process for patient's medical issues, and (6) select a subject for self-learning. The OMP is an older method and has been studied more efficiently; moreover, it is easy to learn and utilise by having the presence of the residents as preceptors, compared to SNAPP. In contrast, SNAPPS requires both preceptors and trainees to learn the framework, so it needs to be implemented systematically via a clerkship or residency program and provides a novel approach to teaching clinical reasoning. The SNAPPS may create more meaningful units regarding questions and uncertainties and make more satisfaction for residents than OMPs (Pascoe et al., 2015; Seki et al., 2016). For both SNAPPS and OMP, preceptors need a deep realisation of the teaching process and have the capability of training according to the characteristics of learners. Further studies are required to measure learner's features and cultural backgrounds, which may affect the case presentation. Both SNAPPS and OMP let preceptors assess the learner's diagnostic argument skills. Two issues would be identified by applying these models: the patient's problem and the learner's realisation of the patients' problem. The realisation of these points is critical for effective patient care and excellent clinical education. Hospitalists do not need to apply all phases of each framework for each gradual approach; however, they can use the components of both models depending on individual learners, team structure, time available or clinical case (Irby et al., 2004; Pascoe et al., 2015; Seki et al., 2016).

5. Conclusion

Approaches of the OMP model emphasised that OMP more effective and efficient because it provides a better learning experience to both preceptor and learner. The OMP developed teaching and learning activities, convert teaching into a conversation, with the thinking work being undertaken by the learner. Both OMP and SNAPPS preceptors require a deep understanding of the teaching method considers the characteristics of the learner and assess the diagnostic reasoning skills of learners. Since the SNAPPS provides a novel approach to teaching, more meaningful units related to questions and uncertainties are induced and more satisfaction is provided to residents than the OMP. Preceptors felt more confident in their ability to rate learner's knowledge when using the OMP. In addition to learner-oriented OMP, preceptors and learners prefer the OMP model relative to the traditional model

6. Recommendations

Applying the OMP as a teaching tool helps learners to know and teach what they have not yet learned and developed personal learning and growth as a clinician and a preceptor. OMP enhances self-esteem, improves learner's understanding, increases learning satisfaction and effectiveness of education, and enhances student's academic achievement. Retraining of teachers through continuous training in workshops in order to make optimal use of this method has been evaluated as useful. OMP is an effective step towards empowering teachers in the teaching process as well as improving practical training in agriculture. Using the OMP skill in clinical teaching can improve the quality and quantity of teaching and contribute to a successful orientation program. Although there are benefits in applying the OMP method, it is necessary to investigate OMP by further studies.

References

- Aagaard, E., Teherani, A., & Irby, D. M. (2004). Effectiveness of the one-minute preceptor model for diagnosing the patient and the learner: proof of concept. *Journal of Academic Medicine*, 79, 42–49.
- Amorosa, J., Graham, M. J., & Ratan, R. B. (2012). Medical students as learners: Transforming the resident-level micro skills of teaching into a parallel curriculum for medical students to aid the transition from classroom to OB/GYN clerkship. *Journal of Education for Health*, 25(3), 135–140.
- Bannister, S. L., Hanson, J. L., Maloney, C. G., & Raszka, W. V. (2011). Using the student case presentation to enhance diagnostic reasoning pediatrics. *Pediatrics*, 128(2), 211–213.
- Bott, G., Mohide, E. D., & Lawlor, Y. (2011). A clinical teaching technique for nurse preceptors: The five-minute preceptor. *Journal of Professional Nursing*, 27(1), 35–42.
- Bowen, J. L., Eckstrom, E., Muller, M., & Haney, E. (2006). Developments: enhancing the effectiveness of one-minute preceptor faculty development workshops. *Teaching and Learning in Medicine*, 18(1), 35–41.
- Brand, M. W., Ekambaram, V., Tucker, P., & Aggarwal, R. (2013). Residents as teachers: Psychiatry and family medicine residents' self-assessment of teaching knowledge, skills, and attitudes. *Academic Psychiatry*, 37(5), 313–316.
- Cayley, W. E. (2011). Effective clinical education: strategies for teaching medical students and residents in the office. *Wisconsin Medical Journal*, 110(4), 177–181.
- Chan, K. L., & Wiseman, J. (2011). Use of the one-minute preceptor as a teaching tool in the gross anatomy laboratory. *Journal of Anatomical Sciences Education*, 4, 235–238.
- Chan, L. K., & Sharma, N. (2014). Effects of training experienced teachers in the use of the one-minute preceptor technique in the gross anatomy laboratory. *Journal of Anatomical Sciences Education*, 7, 124–129.
- Chan, L. K., Yang, J., & Irby, D.M. (2015). Application of the one-minute preceptor technique by novice teachers in the gross anatomy laboratory. *Journal of Anatomical Sciences Education*, 8, 539–546.
- Eckstrom, E., Homer, L., & Bowen, J. L. (2006). Measuring outcomes of a one-minute preceptor faculty development workshop. *Journal of General Internal Medicine*, 21, 410–441.
- Farrell, S. E., Hopson, L.R., Wolff, M., Hemphill, R., & Santen, S. A. (2016). What's the evidence: A review of the one-minute preceptor model of clinical teaching and implications for teaching in the emergency department? *Journal of Emergency Medicine*, 51(3), 278–283.
- Furney, S. L., Orsini, A. N., Orsetti, K. E., Stern, D. T., Gruppen, D. L., & Irby, M. D. (2001). Teaching the one-minute preceptor a randomized controlled trial. *Journal of General Internal Medicine*, 16, 620–624.
- Gallagher, P., Tweed, M., Hanna, S., Winter, H., & Hoare, K. (2012). Developing the one-minute preceptor. *Journal of Clinical Teacher*, 9, 358–362.
- Hickie, C., Kelly, B., & Nash, N. (2016). Development and use of scripted filmed scenarios to teach the one-minute preceptor model. *Academic Psychiatry*, 41(1), 110–113 [https://www.researchgate.net, http://dx.doi.org/10.1007/s40596-016-0524-0](https://www.researchgate.net/http://dx.doi.org/10.1007/s40596-016-0524-0)
- Irby, D. M., Aagaard, E., & Teherani, A. (2004). Teaching points identified by preceptors observing one-minute preceptor and traditional preceptor encounters. *Journal of Academic Medicine*, 79, 50–55.
- Jones, K., & Reis, S. (2010). Learning through vulnerability: A mentor mentee experience. *Annals of Family Medicine*, 8(6), 552–555. www.annfam.org
- Kertis, M. (2007). The one-minute preceptor: A five-step tool to improve clinical teaching skills. *Journal for Nurses in Staff Development*, 23(5), 238–242.

- Shagholi, R., Naimie, Z., & Abuzaid, R. A. (2021). One-minute preceptor (OMP) applied teaching method. *New Trends and Issues Proceedings on Humanities and Social Sciences*, 8(3), pp 51-59. <https://doi.org/10.18844/prosoc.v8i3.6397>
- Lockspeiser, T. M., & Kaul, P. (2015). Applying the one-minute preceptor model to pediatric and adolescent gynecology education. *Journal of Pediatric and Adolescent Gynecology*, 28, 74–77.
- Molodysky, E. (2007). Clinical teacher training: Maximizing the ‘ad hoc’ teaching encounter. *Aust Fam Physician*, 36(12), 1044–1046.
- Ong, M. M., Woo, K. M., & Cook, S. (2016). A general survey on learners and faculty perspectives on educational activities held in the National Dental Centre, Singapore. *Proceedings of Singapore Healthcare*, 25(3), 158–168.
- Ong, M. M., Yow, M., Tan, J., & Compton, S. (2017). Perceived effectiveness of one-minute preceptor in micro skills by residents in dental residency training at National Dental Centre Singapore. *Proceedings of Singapore Healthcare*, 26(1), 35–41.
- Pascoe, J. M., Nixon, J., Lang, V. J. (2015). Maximizing teaching on the wards: Review and application of the one-minute preceptor and SNAPPS models. *Journal of Hospital Medicine*, 10, 125–130.
- Post, R. E., Quattlebaum, G., & Benich, J. (2009). Residents-as-teacher’s curricula: A critical review. *Journal of Academic Medicine*, 84(3), 374–380.
- Rashid, P., Churchill, J. A., & Gendy, R. (2017). *Improving clinical teaching for busy clinicians: Integration of the one-minute preceptor into mini-clinical examination*. Royal Australasian College of Surgeons.
- Sakaguchi, R. L. (2010). Facilitating preceptor and student communication in a dental school teaching clinic. *Journal of Dental Education*, 74(1), 36–42.
- Salerno, M. S., O’Malley, C. A., Pangaro, N. L., Wheeler, A. C., Moores, K. L., & Jackson, L. F. (2002). Faculty development seminars based on the one preceptor improve feedback in the ambulatory setting. *Journal of General Internal Medicine*, 12, 779–787.
- Seki, M., Otaki, J., Breugelmans, R., & Komoda, T., Nagata-Kobayashi, S., Akaishi, Y., Hiramoto, J., Ohno, I., Harada, Y., Hirayama, Y., & Izumi, M. (2016). How do case presentation teaching methods affect learning outcomes? SNAPPS and the one-minute preceptor. *Journal of BMC Medical Education*, 16, 12.
- Teheranti, A., O’Sullivan, P., Aagaard, E. M., Morrison, E. M., & Irby, D. M. (2007). Student perceptions of the one-minute preceptor and traditional preceptor models. *Journal of Medical Teacher*, 29, 323–327.
- Vaughan, E. M., Moreno, J. P., & Johnston, C. A. (2015). Utilizing the one-minute preceptor for patient education American. *Journal of Lifestyle Medicine*, 224–226. <http://www.sagepub.com/JournalsPermissions.nav>.
- Weitzel, K. W., Walters, E. A., & Taylor, J. (2012). Teaching clinical problem solving: A preceptor’s guide. *American Journal of Health-System Pharmacy*, 69(15), 1587–1599.