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Experience

How Medical Students Edited an OSCE Study Guide and Why Should You?

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The Experience

Since 2010, our group of medical students has been involved, as part of our extra-curricular activities, in designing and sharing resources to learn clinical skills in preparation for objective structured clinical examinations (OSCEs) and clinical rotations.[1] In order to address the challenge that OSCEs represent early in our medical training, we publish this year the second edition of a 450-pages OSCE study guide to help medical students learn hypothesis-driven clinical examination (***Figure 1***).[2] With quality books on OSCEs already published, you might wonder why medical students should invest their time and energy in this colossal project, and how to do so?

Meaningful projects create united communities

Creating a synthesis is more useful if you share it with friends. Imagine if one out of four students in your school was involved in the same project. Over the years, more than 500 students of our school contributed to this work through many subcommittees (***Figure 2***). One led to discussion groups on clinical topics; another created an online application. Positive leadership united the students under a scholarly project that they were proud of. Here are pieces of advice taken from our experience.

Figure 1. Cover Page of the Petit Guide des Habiletés Cliniques 2nd Edition (in French), an OSCE Study Guide Entirely Written and Edited by Medical Students of Laval University.

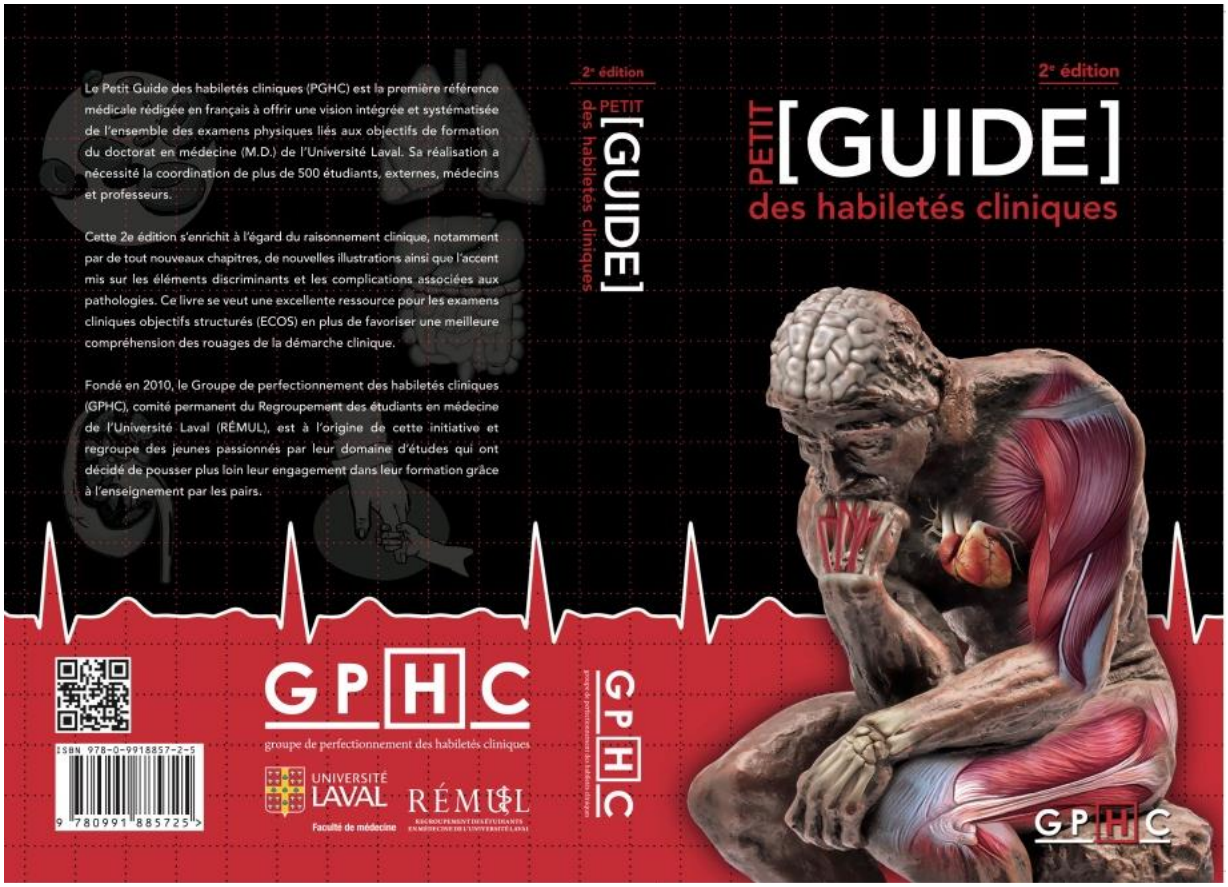

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Figure 2. Over the Years, more than 500 Students of Laval University School of Medicine Contributed to this Work through many Subcommittees.

Don't reinvent the wheel

Whereas most book on OSCEs present general notions, our book emphases on pathologies affecting our population (e.g. tuberculosis in Inuit communities). It takes into account the evolution in local technologies (e.g. implementation in future editions of point-of-care ultrasound findings) and uses frameworks already presented in previous courses, hence familiar to students. Evolving to answer students' needs, we added a section on hypothesis-driven clinical examination focusing on discriminative findings, short clinical scripts and pitfalls.[3-5]

The added value of involving senior students and faculty

More than 40 faculty members and clinicians helped review the chapters, giving us a unique opportunity to learn from them outside class. It is essential that the content be reviewed with content experts but also with the mentorship of clinicians who guided us in what is common, uncommon, or a 'do-not-miss'.[6] Senior students and residents provided insightful comments regarding which format and content would be useful on the ward (***Figure 3***).

You don't need to be a professional editor to publish a book

You might think that editing a book or an application is out of reach for medical students. On the contrary, software for editing is getting simpler and high-quality printing is affordable. We did not involve professional editors and distributed our books in collaboration with medical faculty bookstores. As a non-profit organization, we were able to finance new projects. All students and faculty worked as volunteers.

Have a strong leadership but don't play solo

Based on our experience, we suggest a group of less than four editors-in-chief, in order to have a clear perspective of the project's purpose and to ensure the standardization of all chapters. The editors-in-chief divided the work among chapters' authors. Chapters' authors created groups of students with an interest in the discipline. Students saw the advantage of getting to know the clinicians of this discipline and learn from their clinical experience. Involving lecturers was worthwhile to create links with the content and format of the courses. Throughout the final steps of the editing, we hired a company for the linguistic review and ultimately, before printing and publishing, professional graphists helped us by working on the cover and interior design in creating a good-looking and easy-to-use book.

To teach is to learn

Many hours were invested in discussing, synthetizing and reviewing relevant medical content. Those who learned the most were obviously the medical students who created the books. We believe it had an educational impact that would have been harder to achieve if the Faculty would have imposed this project. Medical students already spend hours making synthesis and studying.[7] Why don't you turn this into a collective educational innovation in your school too?

Figure 3. In this Example of the Hypothesis-Driven Clinical Examination Section, Vertigo is Categorized in Three Tables Displaying the Discriminating Findings of the History and Physical Examination.

VERTIGE

		HISTOIRE	EXAMEN PHYSIQUE
VERTIGE CENTRAL	**AVC** (tronc cérébral, cervelet)	• Sx neurologiques focaux • Vertige constant d'apparition subite	• Nystagmus vertical ou non-épuisable • Anomalies des NC ou des épreuves cérébelleuses
	SEP	• Épisodes non-expliquées de Sx neuro récurrents, réversibles, disséminées dans le temps et l'espace • Intolérance à la chaleur / Uhthoff	• Signe de l'Hermitte • Signes de MNS (faiblesse, spasticité, hyperréflexie, babinski+) • Signes neurologiques focaux, variable
VERTIGE PÉRIPHÉRIQUE	**VPPB**	• Début soudain provoqué par mouvements brusques de la tête (svt dans le lit au réveil) • Durée de quelques secondes	• Dix-Hallpike positif (nystagmus horizonto-rotatoire vers l'oreille aN) • E/P neuro normal (sauf romberg)
	Maladie de ménière	• Épisodes de vertige récurrents de durée de plusieurs minutes à heures • Baisse d'audition, sensation d'oreille pleine ou acouphène persistant entre les épisodes de vertige	• Baisse d'audition neurosensorielle uni ou bilatérale
	Neuronite vestibulaire/ Labyrinthite	• Vertige très sévère de durée de quelques heures à journées avec No/Vo • Associé à une IVRS ou une OMA (labyrinthite)	• Head thrust aN • Baisse d'audition neurosensorielle unilatérale (labyrinthite) • Vésicules CAE si Ramsay Hunt
	Rx ototoxiques (ex : aminoglycoside)	• Lien chronologique entre la prise de médicament et le vertige • Possible perte d'audition bilatérale	• Possible perte d'audition bilatérale
	Neurinome acoustique	• Atteinte de l'audition/acouphène dominante (peu ou pas de vertige) • Apparition progressive sur plusieurs semaines/mois (chronique)	• Baisse d'audition neurosensorielle unilatérale • Paralysie NC V et VII
NON VESTIBULAIRE	**Lipothymie** (choc vagal, arythmie, etc.)	• Patient âgée, connu cardiaque • Sx d'HTO • DRS, Palpitation	• Bradycardie • Rythme cardiaque irrégulier et HTO • TA couchée / debout
	Perte d'équilibre à la marche (polyneuropathie diabétique, etc.)	• Connu diabète de longue date • Démarche instable, chutes	• Atteinte sensitive en gant et en chaussette • Romberg +
	Étourdissement non spécifique (multiple cause, svt associé aux troubles anxieux et dépressifs)	• 4S : Sx nombreux (>6), Stress, Sévérité des symptômes, poor *Self-rated healt* (santé rapportée médiocre)	• E/P normal

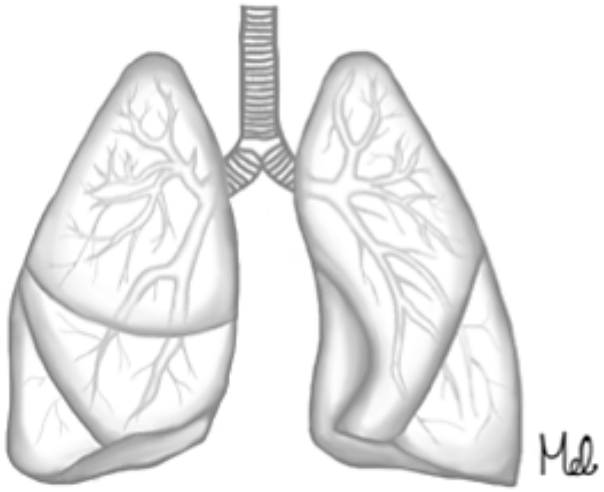
Remarques :
Lors de l'entrevue, il est important de catégoriser l'étourdissement en évitant les questions suggestives. Optez pour une question telle que : « Décrivez-moi la sensation que vous expérimentez sans utiliser le mot étourdie »

- *Vertige : sensation de mouvement rotatoire dans l'espace*
- *Lipothymie : sensation d'évanouissement imminent*
- *Perte d'équilibre à la marche : sentiment de déséquilibre ou d'instabilité qui se produit principalement à la marche*
- *Étourdissement non spécifique : Sensation non spécifique, d'être «juste étourdie» ou de «tête légère»*

Figure 4. More than 40 Faculty Members and Clinicians Helped Review Chapters like this One on Respiratory Medicine.

PNEUMOLOGIE

Florence Tremblay, rédactrice en chef
Audrey Desjardins, Emma Roy, Valérie Roy et **Catherine Sweeney**, rédactrices
Dr Michel Cauchon, Dre Andréanne Côté, Dre Émilie Millaire et **Dr Mathieu Simon**, réviseurs



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Author Contributions

Conception and design the work/idea, Write the manuscript, Critical revision of the manuscript, Approval of the final version: MA, AL, ER, AL, CV.

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