Leveraging Telehealth Education to Disseminate Knowledge and Expand Capacity for Mast Cell Disease Care in Communities Globally

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The Mast Cell Disease Society, Inc (TMS), a national rare disease nonprofit, recently launched a free virtual medical education course to address the top needs of patients affected by mastocytosis, mast cell activation syndrome, and hereditary alpha tryptasemia. The purpose of this study is to evaluate the effectiveness of virtual physician education in mast cell diseases (MCD).

BACKGROUND
The goals of the TMS TeleECHO program are to:
1. Improve local access and reduce wait times for patients in need of MCD expertise
2. Educate and support medical practitioners on evaluating, diagnosing, and treating MCD
3. Promote evidence-based and expert guidelines supported by TMS
4. Support new local experts to educate others in their communities about MCD

The live course format included 8 virtual sessions, each including a 20-minute didactic lecture from a subject matter expert (SME) followed by a question and answer period and presentation of a case by a participant with MCD. Furthermore, our questionnaires have identified barriers to patients receiving basic standard care for their MCDs.

METHODOLOGY
An evaluation questionnaire was sent to all participants following each session. Additionally, a separate questionnaire for overall course evaluation was sent to all participants after the last session.
- Each evaluation included 7 questions with responses ranging from 1 (poor) to 5 (excellent) (Table 1). Five open-ended questions were included as well.
  - What changes they will make in their practice
  - If no changes, what barriers prevent them from making changes to their practice
  - What did they like best about this TeleECHO clinic?
  - What did they like least about this TeleECHO clinic?
  - List topics of future interest and additional comments regarding this clinic.
- The course evaluation questionnaire solicited feedback regarding the format, scheduling, and lecture topics. Participants were provided space to record open-ended feedback as well.
- The SMEs were asked to evaluate their experience based on their session and to provide suggestions for future programs.
- Telehealth education is a valuable tool for disseminating knowledge to healthcare providers. Initiatives such as these can increase access to care and treatment for patients with rare disease.

RESULTS

**Evaluation Data:**
Over the 8 sessions, on average 21 participants attended the live lecture and discussion of which 67% submitted the weekly evaluation questionnaire.

**Participant Course Feedback Questionnaire:**
- 19 of 48 participants completed the course questionnaire.
- Participants were asked to rank the didactic lectures from most to least informative (1=least, 8=most), (Figure 6)
- 84.21% were very likely to recommend this course to colleagues, and 15.79% were likely to recommend to colleagues.

**SME Course Feedback Questionnaire:**
- 4 of the 7 SMEs completed the course questionnaire.
- 100% of SMEs rated their presenting experience as excellent.
- 100% of SMEs were interested in presenting in future TeleECHO courses.
- 25% of SMEs recommended more time for participant questions and case presentations.

**CONCLUSION**
Expanded education for HCP’s in MCD’s was identified through a needs assessment of the MCD community. To increase HCP awareness of and expertise in diagnosis and treatment of MCD, TMS created a virtual educational program for medical professionals utilizing the Project ECHO platform. This telehealth initiative is an important first step in meeting our community’s needs. To learn more visit www.tmsforacure.org.