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GLOBAL DISCUSSION AND APPLICATION OF EVIDENCE BASED MEDICINE

Evidence based medicine (EBM) is defined as “a systematic approach to clinical problem solving which allows the integration of the best available research evidence with clinical expertise and patient values.”¹⁻³ Evidence based medicine is important in healthcare to help provide optimal patient care. This EBM process helps health care professionals to gather appropriate evidence that can be used to help increase a patient’s care. This evidence is important to have to ensure that high-quality information is being used to direct care. Low quality evidence with poor internal and external validity may reduce the probability that a patient receives quality care. This is due to confounding variables that may lead to incorrect conclusions regarding clinical studies. Thus, it is important that healthcare professionals use EBM through clinical research and guidelines to help them in recommending treatment options for patients.

It is also important that health care professionals stay up to date with the latest

drug information and evidence based medicine, so that they can provide high quality care routinely into the future. Staying up to date may involve pursuing continuing education or reviewing medications as they become available in the marketplace. Since it is important that health care professionals are up to date, drug information and evidence based medicine is now required by the Accreditation Council for Pharmacy Education (ACPE), which accredits Schools and Colleges of Pharmacy.⁴ Therefore, evidence based medicine is extensively covered in Schools and Colleges of Pharmacy so that future health care professionals are aware of major concepts.

Recently, the University of Findlay has partnered with the Karnataka College of Pharmacy to enhance student collaboration and application of evidence based medicine. Faculty from the University of Findlay have delivered lectures regarding evidence based medicine concepts to students in the United States and in India. These lectures focused on finding and obtaining research articles that can be used as evidence to support recommendations in a simulated clinical practice experience.

Additionally, lectures focused on evaluating clinical research and discussing what could increase or decrease the level of evidence in a study. The GRADE system of recommendations were discussed using evidence based guidelines from various organizations. The GRADE system of recommendations is a systematic scoring system that is used by health care professionals to help them identify recommendations that have high levels of evidence or low levels of evidence behind them.

During the lectures students used some of the evidence based guidelines to apply what they had learned during the lecture. Scenarios



were discussed so that students could collaborate on hypothetical patient situations. This collaborative process is necessary in practice as the healthcare system moves to a more interprofessional and team based approach to patient care. These cases focused on evidence based guidelines and providing recommendations to the instructor as to how they would approach a similar patient in practice.

This global collaboration is important for a variety of reasons. Global collaboration can help advance patient care in multiple locations in the world. It is also helpful to improve cultural competency and to discuss how differences in culture may play a role in patient care. ACPE has started to require students in Schools and

Colleges of Pharmacy to become more experienced in cultural aspects of patient care. This initiative can provide new knowledge to students both in India and the United States as to how the health care system works in each country. Additionally, global collaboration can help spread intellectual diversity through the integration of new ideas. While evidence based guidelines incorporate many clinical situations, not all situations are covered by the guidelines. Thus, it is important for students as future pharmacists to be able to think critically in regards to a patient scenario. Promoting these critical thinking skills through the sharing of ideas regarding concepts and scenarios discussed in lecture can help facilitate this process.

Integrating evidence based medicine more regularly into clinical practice is an important step to enhance patient care. Similar collaborative efforts among other institutions could be utilized to help students understand evidence based medicine and how to use

guidelines more efficiently. These collaborative processes could be similar to the traditional lecture style or they could be more focused on experiential learning with the application of evidence based medicine being the focus.

Some limitations to integrating evidence based

medicine do exist. The methodology described was useful for a small group of students, however larger groups of students may have more logistical challenges and may require breaking into small collaborative teams with group members from each institution present to provide for a more robust discussion. Additionally clinical studies in the future will need to incorporate a diverse set of patients and settings to allow for adequate conclusions to be drawn from different patient populations in multiple locations worldwide. These clinical studies will help enhance the evidence in more populations and will allow health care professionals to provide more robust and accurate recommendations.

Overall, the collaborative effort between the two institutions helped students to understand how evidence based medicine can be applied clinically. This approach of working collaboratively with other institutions locally, regionally, or globally can help to enhance education through working with others to critically analyze and solve complex problems. In the future, it will be important for future healthcare professionals all over the world to incorporate evidenced based medicine in their practice. Having opportunities to practice and apply these skills will be helpful to enhance patient care.



References

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