Progress Report

Dataset

https://www.aaaai.org/ask-the-expert?q=&d=All+Questions (https://www.aaaai.org/ask-the-expert?q=&d=All+Questions)

Ask the Expert serves the needs of AAAAI(American Academy of Allergy Asthma and Immunology) members. The materials and other information provided by Ask the Expert are for general educational, communication and information purposes only and are neither designed nor intended to replace nor constitute the giving of case specific or other medical advice, treatments or diagnosis. The website provides some Q&A in areas such as allergy, asthma and immunology. Each case of Q&A contains one question and one answer, between a patient and a doctor.

Here's a Q&A case:

> ## Q:
>
> 5/1/2021
> In my training for penicillin skin testing, we used penicillin G 1:100 and 1:10 concentrations for intradermal testing. I have discovered in private practice that undiluted pen G is used, but seems to be very irritating so far. Is there a known non-irritating concentration of penicillin G? Is it not actually irritating for most patients (I haven't done a lot of these after entering practice)? I find it difficult to read results of these intradermal tests, but now wonder if negative intradermal tests of diluted penicillin G are sufficiently sensitive.

A:

You are correct. Undiluted penicillin G will cause skin irritation. According to the 2010 Drug Allergy Practice Parameters, the recommended concentration of penicillin G to use for skin testing is 10,000 U/L. This dilution is recommended both for prick and intradermal testing. In order to attain the recommended dilution, it will require performing two serial 10-fold dilutions as the concentration of the stock bottle is 1,000,000 u/ml.

1. Solensky R, Khan D et al. Drug Allergy Practice Parameter. *Annals of Allergy, Asthma and Immunology* 2010; 105: 250.

I hope this question helps you in the care of your patients.

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Literature Review

"A Systematic Literature Review of Medical Chatbot Research from a Behavior Change Perspective" introduces several existing medical chatbots and relevant literature.

"BayMax: A Smart Healthcare System Provide Services to Millennials Using Machine Learning Technique"The paper put forward the use of a Personal assistance chatbot to handle the messages from users and collectively provide the appropriate answers to it. In addition, a model has been proposed to enumerate precautions for the health related issues.

Conclusion

Next week, I will try to collect data from "Ask the Expert" if necessary. Additionally, I will discuss with my supervisor about my research question and write the initial review.

Reference

[1]T. Gentner, T. Neitzel, J. Schulze and R. Buettner, "A Systematic Literature Review of Medical Chatbot Research from a Behavior Change Perspective," 2020 IEEE 44th Annual Computers, Software, and Applications Conference (COMPSAC), 2020, pp. 735-740, doi: 10.1109/COMPSAC48688.2020.0-172.

[2]G. Nalinipriya, P. Priyadarshini, S. S. Puja and K. Raja Rajeshwari, "BayMax: A Smart Healthcare System Provide Services to Millennials Using Machine Learning Technique," 2019 International Conference on Smart Structures and Systems (ICSSS), 2019, pp. 1-5, doi: 10.1109/ICSSS.2019.8882844.