|  |  |
| --- | --- |
|  | In order to put together an objective, unbiased survey, we first researched our topic through books, the internet, and talking with the Microbiology Department at the local hospital. We learned how bacteria and antibiotics worked and how resistance occurred. We also read about how doctors and patients are contributing to the problem of antibiotic resistance. This is the survey that we sent out:    **Biology Survey**      All responses are for data purposes only. The survey is completely **anonymous**.  1. What type of doctor are you?  2. How long have you been practicing?  3. Since you began practicing medicine, have you changed your criteria used for prescribing antibiotics?  4. Would you prescribe an antibiotic for a viral infection?                        Yes                 No  5. If a patient demands that an antibiotic be prescribed, do you comply?                        Yes                 No  6. Please circle the following type of Penicillin you most commonly prescribe.                        Penicillin G                        Penicillin V                        Ampicillin                        Amoxicillin                        Pivampicillin                        Cloxacillin  7. If your patient is allergic to penicillin and has a respiratory infection, what would be your alternate antibiotic?  8. If a patient returns with the same type of infection, which of the following is your  common course of action? (Please circle a letter)                   a. Prescribe the same antibiotic with an increased dosage                   b. Prescribe the same antibiotic with the previous dosage                   c. Prescribe an alternate antibiotic  9. If a patient has an upper respiratory infection, what do you normally prescribe?  10. Do you perceive bacterial resistance to antibiotics as a problem in the future?            Yes                   Somewhat                   Not at all    **Background Questions**  1. What type of doctor are you?  It is important in a survey to know who your population consists of and what type of patient the doctor deals with on a day to day basis. For example, the patients a Cardiologist would see would differ greatly than what a Pediatrician would see daily. Therefore, the antibiotics prescribed would be different and at different frequencies.  2. How long have you been practicing?  This question gave important insight as to when the doctor attended medical school. This is beneficial information to have because it is only in the last five years that antibiotic resistance has become a very hot topic in the medical field and we thought there might be a pattern found in antibiotics prescribed and the frequency they were prescribed at relating to how long the doctor has been practicing. The number of years in practice also reflects how much experience a doctor has had.  3. Since you have been practicing medicine, have you changed your criteria for prescribing antibiotics?  We included this in the survey simply to see if the doctor was staying current within the medical field and if they are willing to change the way they practice medicine as the times change.  Common Misuses  4. Would you prescribe an antibiotic for a viral infection?  Prescribing an antibiotic for a viral infection is one of the major contributions to the problem of resistance. If an antibiotic is prescribed for a virus, then the resistant bacteria is allowed to emerge or evolve and may not be effective when needed for a bacterial infection. It is better to let viruses run their course. We felt that it was important to our hypothesis to find out if doctors in the Tri-Valley area are contributing to resistance in this form.  5. If a patient demands that an antibiotic be prescribed, do you comply?  This is once again another misuse of antibiotics. By giving an antibiotic unnecessarily, the doctor is once again allowing for the bacteria to evolve and become resistant in the future. This question is important to our hypothesis and prediction also.  6. Please circle the following antibiotic you most often prescribe:  We added this question to the survey to see if the doctors within the population are prescribing the same antibiotic and whether they are varying what they prescribe. Variation in antibiotics is important so that one's immune system does not become resistant to a specific antibiotic. If every doctor were to prescribe the same antibiotic, then resistance would occur at a much higher frequency. This question was also important to the rejection r fail to reject of our hypothesis.  **Scenarios**  7. If your patient is allergic to penicillin and has a respiratory infection, what would be your alternate antibiotic?  We felt it was important to include free response scenarios in the survey to see how the doctors responded and if a variety of antibiotics were prescribes to the patient population. Once again, variation in prescribing antibiotics is very important to stop the problem of resistance.  8. If a patient returns with the same type of infection, which of the following is your common course of action?  We gave the doctor three different responses for them to chose from. The first response stated: prescribe the same antibiotic with an increased dosage. An answer to this choice would indicate that the doctor is contributing to the evolution of resistance. The second response was: Prescribe the same antibiotic with the previous dosage. This also indicates that the doctor is contributing to the problem of resistance, but not as severely as the first response. By continuing to prescribe the same antibiotic, the patient becomes immune to it and eventually not be able to fight it off. The third response was: Prescribe and alternate antibiotic. This is the idea response and shows that the doctor is correctly prescribing antibiotics. By varying antibiotics, the doctor ensures that all strains of bacteria are killed. The first two responses would support our hypothesis that doctors are contributing to the problem of resistance.  9. If a patient has an upper respiratory infection, what do you normally prescribe?  We were once again trying to see if the doctor was varying the antibiotics they prescribe.  **Opinion**  10. Do you perceive bacterial resistance to antibiotics as a problem in the future?  This was simply to get the doctors feeling on our research topic. |
|  |  |

Copyright (C) 1998 Ho-Daddy Productions Inc.

Copyright (C) 1998 Lindsay & Michelle