Drug Resistance

 Name

Institution

Date

**Drug Resistance**

 Drug resistance refers to the reduced effectiveness of medications, including an antineoplastic or antimicrobial in the treatment of diseases or conditions. Antineoplastic or antimicrobial resistance challenges clinical care and also drives research. The main factors that contribute to drug resistance include poor infection management within healthcare settings, over-prescription of antibiotics and self-medication, lack of discovery of new medicines, poor sanitation and hygiene, and non-adherence to the whole antibiotic dose (Martinez & Silley, 2010). Worth mentioning, and uncontrolled use of antibiotics can render them useless and unable to treat certain diseases. Poor conditions lead to the multiplication of pathogens since they offer breeding grounds for bacteria.

Various options for antibiotics are available for particular illnesses. These include predatory bacteria, competitive expulsion of disease-causing pathogens, bacteriophage therapy, and bacteriocins. The benefits of these alternatives include that the treatment exceptionally targets the disease-causing bacteria, but not other groups within the host's commensal, advantageous groups. This is not the case with most antibiotics, which generally result in collateral impacts on commensal bacteria on top of the pathogenic target. The development of these options for disease management and treatment boosts potency, dependability, and deliverability (Beyth et al., 2015).

 Most patients generally do not understand that there are dangers associated with drug resistance. To enlighten patients about these harms, healthcare professionals should devote themselves to ensuring that patients understand them to take the necessary precautions. This can be achieved through programs that educate patients about drug resistance and its dangers. In every interaction with a patient, drug resistance dangers should be mentioned and discussed briefly to reinforce the patient’s knowledge on the topic. Hospitals should also share materials on the same with patients and have some strategically placed in the facilities to encourage them to read at every visit.

**References**

Beyth, N., Houri-Haddad, Y., Domb, A., Khan, W., & Hazan, R. (2015). Alternative antimicrobial approach: nano-antimicrobial materials. *Evidence-based complementary and alternative medicine*, *2015*.

Martinez, M., & Silley, P. (2010). Antimicrobial drug resistance. In *Comparative and Veterinary Pharmacology* (pp. 227-264). Springer, Berlin, Heidelberg.