

Research paper on nursing: research critique

[Technology](#), [Development](#)



Antimicrobial drug's resistance in the twenty first century

Problem statement

The past one century has seen a lot of growth and development in the medical field, and this is one of the factors that have promoted effective medical care to patients, as well as developed breakthrough to various medical conditions and illnesses in all areas across the human life. One of these developments include the antibiotics' breakthrough, which has provided cure to various microorganism-developed illnesses, such as malaria. However, as a result of continued use of the antimicrobial drugs, repeated use has led to resistance to the same, leading to ineffective clinical, medical services.

Before this research was carried out by Kuper K., M. & Septimus E., J., the clinical field had not established a concrete way through which they would address the resistance to antimicrobial medicines. The understanding of this resistance, therefore, will provide a forum through which the clinical field will establish an effective medication strategy that will not only break the antibiotics drugs' resistance, but also long lasting medical care. This is what Kuper and Septimus have sought to achieve through their clinical research (Kuper & Septimus, 2009).

It is necessary to note that the authors have stressed the significance of this study through various means. For example, they have explained the necessity of effective medication, especially on various pathogens that affect the body, as well as ways through which resistant bodies can be treated. In order to fully understand the same, Kuper and Septimus have two gram-positive pathogens, which are in this case resistant to methicillin. These are

Staphylococcus aureus and the Enterococcus species, which is also resistant to vancomycin. This study is, therefore, necessary for readers, since they will be in a better position to understand why various medicinal drugs are not effective in their bodies. This will guide them in various ways, such as reduction of treatment costs resulting from ineffective drugs as a result of pathogens' resistance, as well as gaining a rich understanding of the body, its functions as well as their physiological body set-up (Owens, 2010).

Purpose of the study

The purpose of this study, according to Kuper and Septimus, was to understand why various pathogens develop resistance to antimicrobial drugs, after using the antimicrobial drugs over a given period of time. By understanding the development of this resistance, effective clinical medication will be enhanced, through breaking of the resistance, for example through changing of the drugs, as well as developing a clear understanding of the pathogens' developed resistance to the same.

Research questions

- What major challenges have clinical medical services' providers faced in the twenty first century?
- What is the relationship between pathogens and their developed resistance to antimicrobial drugs?
- How do the stakeholders (patients, medical care providers, the government and antimicrobial drugs' manufacturers) in the healthcare field benefit from understanding various pathogens' resistance to the antimicrobial drugs?

One essential thing to note concerning these research questions is the fact

that they were directly related to the problem, as well as addressing the pathogens' resistance to antimicrobial drugs. It is also necessary to note the fact that the research questions have not only addressed the problem, but also provided a solution to the problem. This is one aspect that many research studies fail to put into consideration.

Literature review

The literature review is the main field whereby Kuper K., M. & Septimus E., J. have concentrated on explaining how antimicrobial drugs' ineffectiveness has affected community health, as well as the financial implications and repercussions resulting from this developing pathogens' resistance to antimicrobial drugs. In order to effectively assert this, Kuper K., M. & Septimus E., J. have used both qualitative and quantitative methods of data presentation, with a higher inclination to the qualitative research method. Referencing is yet another area that Kuper K., M. & Septimus E., J. have focused on, and they have used up-to-date references, focusing on both primary (from HCA Healthcare System, Houston, TX), as well as secondary sources. The authors have, however, not focused on the weaknesses of the research study (which is in this case, lack of a balanced research, since it majorly focused on the state of Texas). Lastly, considering the fact that Kuper K., M. & Septimus E., J. have introduced two pathogens in their study and their resistance to specific antimicrobial drugs (methicillin and vancomycin), they have, consequently, provided adequate information that has played a major role in providing a logical argument for the research study.

Conceptual/theoretical framework

References

Burns, N., & Grove, S. (2011). *Understanding Nursing Research* (5th ed.). Elsevier. ISBN-13: 9781437707502

Kuper K., M. & Septimus E., J. (2009). “ Clinical challenges in addressing resistance to antimicrobial drugs in the twenty-first century.” *US National Library of Medicine and National Institutes of Health*, 86(3): 336-9.

Owens, R. (2010). *Antimicrobial Resistance: Problem Pathogens and Clinical Countermeasures (Infectious Disease and Therapy)*. New Jersey: Prentice Hall, pp. 116.