

UNIVERSITI TEKNOLOGI MARA (UiTM)

**PHARMACISTS' VIEWS TOWARD THE IMPACT OF
PHARMACOGENOMICS ON PHARMACY
PRACTICE IN MALAYSIA**

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CHAPTER 1

INTRODUCTION

1.1 Background of study

This past twenty years have been different and changed due to the implementation of the US Human Genome Project. The US Department of Energy and National Institute of Health have plan the project to be complete in 15 years but they manage to finish it two years earlier from the plan. Their effort have been helped by the rapid technological advances shortened the completion date to the year of 2003. Nowadays, over 100 drugs have been approved by the US FDA for their pharmacogenomics information in the labels of the drugs (Henker et al., 2013).

Pharmacogenomics based pharmacy practice have been effectively accepted by many developed countries so that they can develop the personalized medicine and deliver excellence health care to the community (Bannur, Bahaman, Salleh, & Kek, 2014). Pharmacogenetics can be used to improve patient safety and drug efficacy (Newton, Britain, & others, 2008). Pharmacogenomics deals with heredity and the effect of drugs (Kalow, Meyer, & Tyndale, 2005). Pharmacogenomics is can give more powerful drugs, better and safer drugs the first time, and advanced screening for disease. Besides that it also can give better vaccines, improvements in the drug discovery and approval process as well as more accurate methods of determining appropriate drug dosages (T P, M, Jose, Chandran, & Zachariah, 2009).

1.2 Problem statement

Pharmacogenomics has been widely applied in other countries clinical pharmacy practice such as the United States of America. This country has really great effect of genetic admixture on pharmacogenomics because till nowadays the intermarriages between Amerindians, Europeans, and Africans have been done since five hundred years ago. This has resulted in wide-ranging population heterogeneity in that country (Suarez-Kurtz & Pena, 2006). On the other hand, Malaysia is also a developing country but the knowledge or awareness in this new field are low. This pharmacogenomics service can give a big impact in our clinical pharmacy practice to treat patients efficiently. So what are the TDM pharmacists' views towards the impact of pharmacogenomics on pharmacy practice in Malaysia? And what are the role that pharmacists could play in contributing a pharmacogenomics service to the community?

1.3 Hypothesis

Null hypothesis : Lecturer Pharmacists give positive views towards the impact on pharmacogenomics on pharmacy practice in Malaysia

Alternative hypothesis : Lecturer Pharmacists give negative views towards the impact on pharmacogenomics on pharmacy practice in Malaysia