Contemporary Clinical Trials Communications 3 (2016) 102–110

Contents lists available at ScienceDirect

Contemporary Clinical Trials Communications

journal homepage: www.elsevier.com/locate/conctc

The role of corruption and unethical behaviour in precluding the placement of industry sponsored clinical trials in sub-Saharan Africa: Stakeholder views

Efe Egharevba*, Jacqueline Atkinson

Glasgow University, Institute of Health & Wellbeing, 1 Lilybank Gardens, Glasgow, G12 8RZ, United Kingdom

ARTICLE INFO

Article history:
Received 27 December 2015
Received in revised form
23 April 2016
Accepted 26 April 2016
Available online 30 April 2016

Keywords:
Clinical trials
Ethics
Sub-Saharan Africa
Corruption
Pharmaceutical

ABSTRACT

Clinical trials still represent the gold standard in testing the safety and efficacy of new and existing treatments. However, developing regions including sub-Saharan Africa remain underrepresented in pharmaceutical industry sponsored trials for a number of reasons including fear of corruption and unethical behaviour. This fear exists both on the part of pharmaceutical companies, and investigators carrying out research in the region. The objective of this research was to understand the ethical considerations associated with the conduct of pharmaceutical industry sponsored clinical trials in sub-Saharan Africa.

Corruption was identified as a significant issue by a number of stakeholders who participated in semi-structured interviews and completed questionnaires. Additionally, fear of being perceived as corrupt or unethical even when conducting ethically sound research was raised as a concern. Thus corruption, whether actual or perceived, is one of a number of issues which have precluded the placement of a greater number of pharmaceutical sponsored clinical trials in this region.

More discussion around corruption with all relevant stakeholders is required in order for progress to be made and to enable greater involvement of sub-Saharan African countries in the conduct of industry sponsored clinical trials.

1. Background

1.1. Introduction

Clinical trials are the mainstay in new drug development processes, as well as for product license extensions for existing therapies [1]. Despite the fact that developing countries are usually under-represented in research due to a lack of commercial viability and trained researchers, Africa is emerging as an important destination for clinical trials [2]. Sub-Saharan Africa has largely been excluded from industry sponsored clinical trials for a number of reasons. Whilst many of these reasons are related to commercial and practical concerns, there are also a number of ethical issues which have precluded the placement of industry sponsored research in this region to date. These issues include concerns around the appropriate mechanisms for delivering informed consent, fear of being considered exploitative particularly with the conduct of randomised placebo-controlled studies, as well as other considerations around continued access to medicines once the trials are complete [3,4].

The use of placebo in clinical trials is an arguably contentious benefit of conducting research in developing countries. On one side placebo-controlled trials are easier to implement in developing countries due to less availability of standard of care treatments and a greater number of treatment naïve patients and thus the ability to produce less ambiguous data which might reduce the time it takes to approve a new drug [5]. However, there are obvious ethical concerns with conducting studies in developing countries which would not be approved in developed countries and it could be argued that the conduct of such research would only be appropriate if reduced timelines to drug availability would be relevant for participating subjects. This is an important point to consider as there are a number of examples of drugs which have not been marketed in the developing countries in which they were tested. Limaye et al. assessed the relationship between the number of clinical trials conducted and the number of new drug approvals

* Corresponding author.
E-mail address: efe.egharevba@googlemail.com (E. Egharevba).

http://dx.doi.org/10.1016/j.conctc.2016.04.009

(NDAs) issued in India and South Africa and described a gap between the number of studies conducted and marketed availability of these new drugs in these two developing countries. The study concluded that of trials conducted with sites in India and South Africa, approximately 40% and 60% respectively led to a market authorisation in the EU or US without an approval in India or South Africa [6]. Homedes & Ugalde discuss similar issues in Latin American countries where sponsor organisations have conducted pivotal clinical trials and either failed to subsequently market the drug in that country or have marketed the drug at a prohibitively high cost, precluding access to treatment for many patients in that country [7].

Another significant concern on the part of pharmaceutical companies, however, is that of corruption. The African Development Bank estimate that corruption costs the continent of Africa around $148 billion per year [8]. In comparison, developed countries gave $22.5 billion in aid to sub-Saharan Africa in the year 2008 [9]. These concerns around corruption and the associated implications for patient safety, data integrity, and the industry's reputation have all played some role in preventing pharmaceutical companies from placing more clinical trial work in the region, despite Africa's strengthening healthcare systems and growing economies. There are equally, however, concerns around corrupt or unethical industry practices on the part of healthcare professionals based in the region. These concerns are particularly relevant for countries where there are historical cases of pharmaceutical corruption. For example, in Nigeria where the impact of the meningococcal meningitis outbreak and subsequent trial of trovafloxacin by Pfizer [10] in 1996 during which 11 children died and many more were left disabled after receiving the experimental treatment trovaflaxin (Trovan) received much attention [11]. More recent examples of unethical behaviour in the conduct of clinical trials in developing countries include that of a trial which ran from 1997 to 2003 in Uganda sponsored by Boehringer Inglheim who were testing nevirapine for the treatment of HIV. During this trial investigators failed to obtain patients' consent regarding changes in the experimental design and administered incorrect doses of the drug [12]. More recently the DART trial conducted in Uganda, Zimbabwe and the Ivory Coast which compared structured treatment interruption (STI) with continuous therapy (CT) in patients receiving anti-retroviral therapy for the treatment of HIV highlighted unethical behaviour wherein patients who were on the STI arm of the trial were not switched back to the CT arm of the trial, despite the Data Safety Monitoring Board (DSMB) finding that treatment interruption was associated with a higher risk of disease [12].

Clinical trials can potentially play an important role in helping to contribute to the development of a country's healthcare system in a number of ways including raising research standards, exposing physicians to new diagnosis and treatment modalities and bringing health improvements as well as badly needed investment [13]. Angwenyi and colleagues describe the benefits of investment from clinical trials in studies that were conducted in Ghana, Kenya and Burkina Faso, summarising how all three countries benefited from upgrades and renovations to the physical infrastructure, additional medical supplies and medical equipment [14]. It is also important, however, to note that despite the potential collateral benefits of clinical trials, the benefit of faster access to drugs may not always be relevant as a recent paper by Hay et al. reported that only 10.4% of drugs entering into phase I clinical trials are approved by the US Food & Drug Association [15]. However, in order for sub-Saharan Africa to increase its footprint in the clinical trial space, the topic of corruption, whether actual or perceived, and its associated impact on data quality, patient safety and pharmaceutical engagement in the region needs to be further explored, understood and addressed. Whilst corruption represents just one of a number of challenges related to conducting trials in the region, it represents arguably one of the most significant and therefore needs to be addressed before other more practical topics can be discussed.

1.2. Objectives

This is part of a larger study of stakeholders' views on the benefit, if any, to the population and the ethical implications of conducting industry sponsored clinical research in the sub-Saharan region of Africa.

This article presents those research findings which are associated specifically with corruption and unethical behaviour.

2. Methods

The study involved two parts. Since there is little research on views of stakeholders interviews were conducted to explore issues. These were than used to develop a questionnaire.

2.1. Choice of countries

For the interviews Nigeria and Ghana were chosen as the two sub-Saharan countries from which health care professionals would be contacted due to their size, economic status, and relative stability at the time the research was planned. Existing links to health care professionals also existed Pharma respondents were in Europe (UK & Switzerland) and South Africa. For the questionnaire study the countries targeted for pharma respondents were the UK, US, and Switzerland however through snowballing questionnaires from pharma were also completed in France and Spain. For the healthcare professional group the countries in Africa were expanded to include were expanded to include South Africa however through snowballing respondents from Uganda, Egypt, and Liberia also completed the questionnaire.

2.2. Chronic versus infectious

The reasons chronic diseases were chosen are twofold; firstly, there is evidence within the literature which illustrates increasing levels of chronic disease in the region [15,16]. Secondly, infectious disease rates are higher in developing countries (and therefore unbalanced when compared to the disease profile of Western countries). In order to compare the issues related specifically to the conduct of trials in a like for like manner, focusing on chronic disease allows comparison of patients in both the developed and developing world.

2.3. Identifying stakeholders

Two groups of stakeholders were involved; industry professionals and health care professionals in the relevant countries. Stakeholders were identified from a variety of sources including literature reviews and internet searches. For healthcare professionals this was largely done through academic journal review contributions. No specific journals were targeted however search efforts focused on contributors to articles related to clinical trials conducted in patients in Ghana and Nigeria. Healthcare advocacy and government websites were used to identify potential government respondents. Some stakeholders from the pharmaceutical group were identified through existing professional links as well as via snowballing techniques. Although not specifically targeted, snowballing also led to the inclusion of a Non-Government Organisation (NGO) respondent with experience in clinical trials.

For the interviews, senior pharmaceutical representatives