

# Vaccine Controversies

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## INTRODUCTION

Vaccine controversies have occurred since almost 80 years before the terms vaccine and vaccination were introduced, and continue to this day. Despite strong evidence that the recommended vaccines are safe and effective, unsubstantiated scares regarding their safety still occur, resulting in outbreaks and deaths from vaccine preventable diseases. Another source of controversy is whether mandatory vaccine schedules followed in children violate civil liberties or religious principles.<sup>1</sup>

Safety concerns raised often follow this recognisable pattern- a potential adverse effect is hypothesised, a premature announcement is made, the initial study is not reproduced, and finally it takes several years for the vaccine to regain public confidence.<sup>2</sup>

Scientific evidence for the effectiveness of large scale vaccination campaigns is well established.<sup>3</sup> Vaccination campaigns helped eradicate small pox which once killed one in seven children in Europe and have nearly eradicated polio. As a more modest example, infections of bacterial meningitis caused by *Haemophilus influenzae* have decreased by over 99% in US since the introduction of a vaccine in 1988.

Many forms of Alternate Medicines like Homeopathy and Naturopathy are based on philosophies that oppose vaccinations and have practitioners that voice their opposition.<sup>4,5</sup> The reasons for their opposition are complex and are based on the early philosophies that guide their origin and development.

Alternate medicine proponents gain in acceptance by promoting vaccine conspiracy theories and gain monetarily through the sale of ineffective and expensive medications, supplements and procedures like chelation therapy and hyperbaric oxygen therapy, supposedly sold to cure the damage caused by vaccines.

Homeopaths sell water injections that are alleged to have a natural vaccine like action. Other groups like lawyers and legal groups organizing court cases and class action law suits against vaccine providers have a vested interest in promoting the unsafeness of vaccines. Also the alternate medicine manufacturers have accused vaccine providers of misrepresenting the safety and effectiveness of vaccines, covering up and suppressing information and influencing public health decisions for financial gain.

The United States has a complex history of compulsory vaccination particularly in enforcing compulsory vaccinations among American soldiers in times of war. Many wars like the Civil War have resulted in more deaths due to disease than due to wounds inflicted during war (62,000 deaths). Many a time war becomes a battle against disease as much as it is against the enemy.

Vaccines have been opposed on religious grounds ever since it has been introduced.<sup>6</sup> Religious opposition continues to the present day on various grounds raising ethical difficulties when the number of unvaccinated children threatens to harm the entire society. Many governments allow parents to opt out of their otherwise mandatory vaccinations on religious grounds.

The cell cultures of some viral vaccines and the virus of the Rubella vaccine<sup>7</sup> are derived from tissues taken therapeutic abortions performed in the 1960s leading to moral objections from many quarters.

In Kerala a prominent popular weekly magazine carried an article highlighting certain minor post-vaccine adverse events as causing mortality and called the vaccines agents of death and called for boycott of vaccines with a cover story and illustrations. The public outcry was predictable with many heated debates on prime time TV channels and demand for enquiries. Later the weekly retracted the article after much opposition developed with Indian Medical

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Association in the forefront but by then the damage was done. Even previously many religious groups in Malappuram district called vaccines as being targeted against a certain religion to promote ill health and death among the children. As a result of all these negative campaigns where once Malappuram district had a near 100% vaccination record recent figures suggest that only 74% children are fully protected. Hence a sustained campaign is needed against these unscientific campaigns with IMA having to take a lead role.

## END NOTE

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**Editor's Remarks:** Recent figures quote the number of unvaccinated children in Malappuram district of

Kerala to be as high as 25%. This is quite alarming since Kerala is one of the states which had achieved 100% vaccination several decades ago. Some of the causes for this retrograde step is examined in this article.

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