

# Attitudes and Beliefs toward Routine Vaccination: A Survey of Kansas Chiropractors

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## 1. Introduction:

The administration of routine vaccination against common preventable infectious diseases such as measles, chickenpox and tetanus has become an accepted component of preventive healthcare in the traditional U.S. health care system. Vaccination rates among the general U.S. population have generally been increasing over recent years. However, recent outbreaks of vaccine preventable illnesses such as pertussis have once again forced the public health community to examine the prevalence of vaccination among children. The majority of allopathic physicians and healthcare providers strongly believe in the safety and efficacy of routine vaccinations [1]. A significant body of well-conducted research has demonstrated the general safety and efficacy of these vaccines. The issue of vaccine safety however, is still debated by patient safety advocates and by some practitioners of alternative healthcare. While traditional medical doctors (M.D.) have been very supportive of immunization practice, it is unknown whether chiropractic physicians are equally enthusiastic. Utilization of chiropractic physicians for routine health care has become much more prevalent in recent years and the number of practicing chiropractors is expected to reach 100,000 in the United States by 2010 [2]. Historically, educational practice in the chiropractic profession has not been generally supportive of the concept of vaccination. A limited study published in 2000 revealed that only 30% of the small sample of chiropractors surveyed actively recommended vaccinations [3]. A national survey of chiropractors published in 1994 found that one-third agree that there is no scientific proof that immunization prevents disease, that vaccinations cause more disease than they prevent, and that contracting an infectious disease is safer than immunization [4]. Further investigation of the literature however, reveals that little research has been done to determine current attitudes and beliefs of non-traditional healthcare providers such as chiropractors toward immunization. In order to more fully investigate potential barriers to routine vaccination, a pilot study of Kansas chiropractors and their beliefs and attitudes concerning immunization was performed.

## 2. Experiment, Results, Discussion, and Significance:

*Methodology:* This cross-sectional, pilot study was developed and administered through the Department of Physician Assistant from May through July 2005. A listing of chiropractors was obtained from the chiropractic licensing body in Kansas. A random sample of 500 chiropractors was selected from the 1,049 chiropractors in Kansas for inclusion in this study. A survey tool was developed to collect routine demographic information as well as information about personal/family immunization status and attitudes about safety and effectiveness of routine vaccination. Participants were also asked whether or not they routinely recommended routine immunizations to their patients. The survey tool was reviewed by a chiropractor and other local health care providers in order to improve face and content validity. Data were analyzed using standard statistical measure for descriptive and nominal data.

*Results:* Of the 500 surveys mailed, 166 surveys were returned for a response rate of 33.2%. Of the respondents, only 42.7% agreed that vaccines are effective in preventing disease. (Table 1) In addition, only 27.7% of respondents agreed that immunizations are generally safe when administered appropriately. (Table 2) Finally, it is interesting to note that the majority of chiropractors (54.2%) did not encourage their patients to be immunized. (Table 3)

**Table: 1**

Immunizations are effective in the prevention of disease

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Strongly agree	12.0%
Agree	30.7%
Neutral	12.1%
Disagree	19.3%
Strongly disagree	19.9%

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**Table: 2**

Belief that immunizations are generally safe when administered according to accepted guidelines

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Strongly agree	6.0%
Agree	21.7%
Neutral	20.5%
Disagree	28.3%
Strongly disagree	23.5%

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**Table: 3**

Encouraged patients to be immunized

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Yes	16.3%
No	54.2%
Under certain circumstances	29.5%

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### 3. Conclusion:

Results indicate that the chiropractic community is still divided in their beliefs and attitudes regarding immunizations. Although they believe that immunizations are effective in the prevention of disease, they feel that immunizations are unsafe even when administered according to accepted guidelines. It remains a public health concern that a significant anti-vaccination attitude still exists among some chiropractors. With the increasing acceptance of chiropractors as providers of pediatric care, it will be important to further investigate the background and nature of these beliefs. Due to these beliefs, many patients may not receive the full benefits of knowledge regarding the risks and benefits of immunization. Further research should be conducted on the national attitudes and beliefs of the chiropractic community as well as a comparison with the allopathic physicians' beliefs and attitudes towards immunizations.

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