BALANCING SCIENCE AND PRACTICE FOR CHILD IMMUNIZATION IN RUSSIA AND THE USA NOVGOROD, RUSSIAN FEDERATION 17-19 SEPTEMBER 1996

Presented at the
31st National Immunization Conference
Detroit, Michigan
19-22 May 1997

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BASICS Technical Directive: 000 RF 01 016
USAID Contract Number: HRN-6006-C-00-3031-00

The writer attended the 31st National Immunization Conference in Detroit, Michigan. Although the meeting was for four days, the writer arrived the evening before his presentation and departed immediately after the presentation was given. The presentation was entitled "Balancing Science and Practice for Child Immunization in Russia and the USA." It was co-authored with Dr. Lance Rodewald of the Centers for Disease Control and Prevention. The presentation described an attempt in Russia to influence the manner in which immunization is taught and practiced in Russia.

A copy of the notes of the presentation is attached as Appendix A and the slides appear in Appendix B.

APPENDIXES

APPENDIX A

PRESENTATION NOTES

APPENDIX A

PRESENTATION IN DETROIT AT NATIONAL IMMUNIZATION CONFERENCE

The USA and Russia face a similar challenge: how to sustain high and timely immunization coverage when the incidence of disease is low. Once doctors and the public become complacent, preventable diseases predictably return, as with measles in 1989-1991 in the USA and diphtheria since 1989 throughout Russia.

In Russia, many providers and the public have an exaggerated fear of vaccines, believe that children must be completely well to withstand the stress of vaccination and avoid serious adverse events, and believe that Russian children are weak and unable to mount an effective immune response. A high rate of temporary medical contraindications in Russia delays the timely start and completion of immunization and leaves children unprotected. Specialists (immunologists and neurologists) are usually consulted to determine whether a child is healthy enough to be immunized. These consultations often result in prescribed delays in immunization until the infant is healthier. The most common contraindications are ones that are not recognized as abnormal conditions in the US and are not considered valid contraindications.

In the NIS, medical schools and post-graduate training institutes devote very little time to training about immunization. Furthermore, medical students specialize in their first year of studies and are not exposed to thinking about immunization. And yet in the Soviet model of health care, narrow specialists are given an unusual role in screening each child for immunization. For example, neurologists are routinely consulted to determine if each child, all of whom are presumed to be weak, are able to withstand the presumed stress of vaccination. Furthermore, the prevailing economic conditions have resulted in a near absence of materials on immunization with the result that providers rely for their information and knowledge almost exclusively on decrees and the inserts which come with the vaccine.

Although the official list of contraindications was simplified, clarified and shortened in 1993, it is more conservative than in the USA and compliance is not considered to be high. (Pediatricians see their role as protecting children from adverse effects of immunization -- (first do no harm: protect children from vaccine complications!!) In Russia, pediatric immunization coverage against diphtheria and tetanus is 15% less than against pertussis (and up to 30% less in some areas), because DT is widely used in place of DPT for the primary series of vaccination. This disparity illustrates continuing high levels of false contraindications and the threat of a pertussis epidemic.

While negative mass media about immunization has contributed to poor attitudes on the part of providers and the public, the diphtheria epidemic in Russia -- with 100,000 cases in the past 5 years -- has been a "wake-up call" for many providers.

The BASICS Project (Basics Support for Institutionalizing Child Survival) organized a Seminar on "Balancing Science and Practice for Child Immunization in Russia and the USA" from 17-19 September 1996 in Novgorod in the Russian Federation. BASICS, a five-year international public health project funded by the U.S. Agency for International Development (USAID), works in over 30 countries. Co-sponsored by CDC, the Russian Ministry of Health (MOH), Russian Academy of Medical Sciences, World Health Organization (WHO), and with additional support in kind from the American Academy of Pediatrics (AAP), the Seminar attracted top international and Russian experts in the field of immunization.

The Seminar exposed medical faculty and operational staff to recent developments on the safety and efficacy of immunization; encouraged an exchange of views and practical/operational solutions to problems shared by both the USA and Russia; introduced practical tools and materials (curricula, lists of true and false contraindications, recommendations from international bodies, policies and standards in USA, etc.); reviewed options to ensure effective implementation of shortened lists of contraindications; and forged links domestically and internationally.

The 40 seminar participants and 15 observers included medical faculty responsible for training future cohorts of medical students and pediatricians at medical colleges and post-graduate training institutes, operational people responsible for implementing and administering immunization and disease control programs in three target oblasts (States), and senior staff from the MOH in Moscow. This mix of academic faculty and operational staff resulted in a rich exchange of experience and diverse perspectives. The medical school faculty was typically the Chair of Pediatrics or Infectious Diseases, while the operational staff generally included the Chief Pediatrician, Chief Epidemiologist, and Director of MCH at the oblast (state) level. Six of the other Newly Independent States of the former Soviet Union also sent staff, including the Chief Pediatrician of four of these States.

Principal topics included: rates of post-vaccination complications; true and false medical contraindications to immunization; immunization of sick children; identifying and reducing missed immunization opportunities; and overcoming negative attitudes towards immunization.

Folders were given to each participant and contained several hundred pages of documents in Russian, of which over half had been specially translated by BASICS for the Seminar. (SHOW BINDERS AND PASS OUT TABLE OF CONTENTS.) The folder included each lecture as well as thirty key documents: guidelines and policies in common use in industrialized nations, practical tools, and supporting papers. The materials reflected the scientific basis upon which immunization policies and practices are grounded and were primarily drawn from CDC, AAP, WHO, academic journals, and States and Counties in the USA. They were selected to satisfy the need for information in Russia on vaccine safety, post-vaccination complications, contraindications, and screening tools.

Participants especially appreciated receiving Russian copies of the "Standards for Pediatric Immunization Practices;" "General Recommendations on Immunization" from the Advisory Committee on Immunization Practices (ACIP); and many of the materials from CDC which have proved so useful in the USA: "Guide to Contraindications to Childhood Vaccinations;" "6

Common Misconceptions about Vaccination and How to Respond to Them;" "Materials for Enhancing Immunization Content in Nursing Education and Practice; "Vaccine Safety Surveillance: The Vaccine Adverse Events Reporting System;" and excerpts from *Epidemiology and Prevention of Vaccine-Preventable Diseases.*

In addition, many practical tools which have been developed at State and County level in the USA were handed out in Russian, including: "Childhood Immunization Screening Questions." (California Department of Health Services. April, 1993)(particularly useful); "Assessing the Child who Needs Immunizations." *Immunization Opportunities*...The Future is in Your Hands: a videotape and users guide on immunizations for registered nurses and physicians (Michigan Nurses Association. 1994); "Possible Side Effects from Immunizations." (Immunization Action Coalition. St. Paul, Minnesota. March, 1995); and "Case Studies on Medical Contraindications to Immunization" adapted from a California Nurses Association training course (California Department of Health Services. 1993). A video produced by the California Department of Health Services with technical input from CDC entitled "When to Immunize and When to Wait: A video guide for immunizing infants and toddlers" was shown at the Seminar and the complete script and related materials were handed out in Russian. A poster from the Texas Department of Health which succinctly displays all the precautions and true and false contraindications was seen as a model for placing useful information into the hands of providers. Some recent journal articles by CDC staff from the National Immunization Program, including Stephen Hadler, Raymond Strikas, and Robert Chen, were also distributed in Russian.

Nearly all of the respondents stated their intention to use these materials in their practical work and for training. Some specifically intend to disseminate them in their oblasts in an effort to reduce contraindications.

82% of the participants (including 89% of the pediatric faculty) strongly agreed with the statement that "overall, the materials in the folders are appropriate" and remaining 18% agreed. 66% of the participants strongly agreed (including 89% of the pediatric faculty) with the statement that "I think that these materials are relevant to the work that I do" and the remaining 34% agreed. Nearly all of the respondents stated their intention either to use the materials themselves in their practical work or to use them in training. Some specifically intend to disseminate them within their regions. By far the most frequent response to the question "do you intend to introduce any ideas, materials or methods from the seminar into your work?" was "to change the list of contraindications."

Although this was not a policy-setting meeting and the Seminar was not asked to produce recommendations, nevertheless there were some important conclusions:

- bringing together operational staff with professors from medical institutes was an excellent idea, as academic faculty are not familiar with public health approaches and strategies being pursued by public health bodies. A better partnership is needed between pediatricians and epidemiologists.

- medical staff and academic faculty want to have greater access to the world's scientific literature concerning immunization.

- there is a profound need for more training materials, articles, and books for health workers on vaccine safety, side effects, and contraindications, versus the exclusive reliance on decrees for this information. Health staff want official lists of contraindications and rules for simultaneous immunization to be widely disseminated; vaccine inserts are outdated and contradict new recommendations.

- there is a need to base immunization policies on scientific evidence and not on unfounded myths. In the USA, at-risk children are targeted for vaccination, while in Russia healthy children are targeted.

- professional medical associations (e.g., pediatric societies) and expert councils need to participate with the MOH in setting immunization policies. Participants were intrigued by how pluralistic societies formulate policies through a continuous dialogue between medical disciplines and between the public and private sectors, with inputs from professional associations and other stakeholders. (Standards for Pediatric Immunization Practice)

- the Government in Russia needs to put greater advocacy effort into publicizing the need for and importance of immunization; the public needs attractive advocacy materials. (Better skills should be taught to health workers for communicating with mothers about immunization.)

- the media has an important role and social responsibility in presenting the true facts about immunization. The media need to use more modern and persuasive methods to inform, educate and communicate with the public and providers about the importance, safety and effectiveness of immunization and the dangers of re-emerging infectious diseases.

- providers need more positive incentives ("cookies"), as opposed to only negative ones ("whips") and people need to take greater responsibility for their own health (the "absence of whips" is now the only "cookie"). Some pediatricians want a vaccine injury compensation plan for their own protection.

- better training of nurses and narrow specialists is needed about immunization. For example, neurologists, ENT specialists, and others have an important consulting role to play in vaccinating children with chronic conditions.

- a uniform curriculum for teaching about immunization is needed at the undergraduate and post-graduate levels, as it is often taught differently by different departments within same medical institute.

- vaccinations need to be covered by the medical insurance organization to assure proper financing of these activities.

- vaccination cards need to be given to parents.

- surveillance of adverse events is poorly conducted because of fear to report, lack of clinical criteria, insufficient contacts between clinicians and epidemiologists, and lack of enforcement.

- the management information system for immunization and modern methods of monitoring/recording/feedback promoted by BASICS elsewhere (in Kyrgyzstan where the percent of children contraindicated for DPT fell from 35% to 5% within six months in a test district) should be tried in target oblasts to reduce contraindications. This intervention is similar in nature to the assessment, feedback, integration, and exchange (AFIX) process in use at US public health clinics and some private practices.

After the Seminar, the MOH reviewed the materials given to each participant and decided to send copies of all the lectures and all the technical documents to 50 key medical faculty responsible for pre-service and in-service immunization training of medical students and pediatricians in medical schools and post-graduate training institutes in Russia.

The Seminar has already become a model for similar seminars in other countries of the former Soviet Union, as well as in other more developed parts of the world. At least two countries of the former Soviet Union -- Moldova and Kyrgyzstan -- have begun a revision of their medical school curricula as a result. And BASICS and WHO conducted a similar regional seminar for the five Central Asian Republics in March 1997. The first web site in the MOH has been created by BASICS and these documents have been posted. A full-length article on the Seminar appeared in the most widely-read medical newsletter -- Meditsinskaya Gazette -- with a circulation of over 70,000.

The Seminar was a modest investment with a potentially large impact on future immunization policies, teaching and practice in Russia and other Newly Independent States. The contribution of CDC and State Immunization Branches throughout the USA was invaluable.

APPENDIX B

SLIDE PRESENTATION

APPENDIX B: SLIDE PRESENTATION

BALANCING SCIENCE AND PRACTICE FOR CHILD IMMUNIZATION IN RUSSIA AND THE USA

NOVGOROD, RUSSIAN FEDERATION

17-19 SEPTEMBER 1996

ROBERT STEINGLASS
AND
LANCE RODEWALD

PRESENTED AT THE
31ST NATIONAL IMMUNIZATION CONFERENCE

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PRESENTATION

- NATURE OF PROBLEM IN RUSSIA REGARDING CONTRAINDICATIONS

- ONE APPROACH IN RUSSIA TO IMPROVE MEDICAL EDUCATION ON IMMUNIZATION

- RELEVANCE OF STATE AND COUNTY APPROACHES IN USA TO ADDRESS PROBLEMS/IDENTIFY SOLUTIONS IN RUSSIA

THE CHALLENGE IN RUSSIA AND US

HOW TO SUSTAIN HIGH AND TIMELY IMMUNIZATION COVERAGE WHEN THE INCIDENCE OF DISEASE IS LOW

MANY PROVIDERS AND THE PUBLIC IN RUSSIA HAVE:

- EXAGGERATED FEAR OF VACCINES

- BELIEVE CHILDREN MUST BE COMPLETELY WELL TO WITHSTAND STRESS OF VACCINATION

- BELIEVE THAT RUSSIAN CHILDREN ARE WEAK AND UNABLE TO MOUNT AN EFFECTIVE IMMUNE RESPONSE

- HIGH RATE OF TEMPORARY FALSE MEDICAL CONTRAINDICATIONS IN RUSSIA

- SPECIALISTS ROUTINELY CONSULTED TO DETERMINE WHETHER CHILD IS HEALTHY ENOUGH TO BE IMMUNIZED

PROBLEMS

- LITTLE TRAINING ABOUT IMMUNIZATION

- EARLY SPECIALIZATION

- NARROW SPECIALISTS HAVE MAJOR ROLE IN SCREENING

- LACK OF MATERIALS ON IMMUNIZATION

- NEGATIVE MEDIA

IMMUNIZATION COVERAGE RATES AGAINST DIPHTHERIA AND PERTUSSIS IN INFANTS BELOW 12 MONTHS OF AGE, RUSSIA 1986-96

YEAR	DIPHTHERIA*	PERTUSSIS**
1986	70.8	60.1
1987	79.9	57.8
1988	69.7	50.1
1989	82.7	60.3
1990	68.5	60.2
1991	68.8	58.8
1992	72.6	62.0
1993	79.2	65.0
1994	88.1	71.7
1995	92.7	81.0
1996	95.1	86.9

* DIPHTHERIA = 3 DPT OR Td, OR 2 DT

** PERTUSSIS = 3 DPT

Source: State Committee for Sanitary and Epidemiological Surveillance, Russia

THE SEMINAR

"BALANCING SCIENCE AND PRACTICE FOR CHILD IMMUNIZATION IN RUSSIA AND THE USA"

17-19 SEPTEMBER 1996

NOVGOROD, RUSSIAN FEDERATION

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ORGANIZERS

- RUSSIAN MOH
- BASICS (BASIC SUPPORT FOR INSTITUTIONALIZING CHILD SURVIVAL)

SPONSORS

- RUSSIAN ACADEMY OF MEDICAL SCIENCES
- WHO
- CDC
- AMERICAN ACADEMY OF PEDIATRICS (AAP)

PURPOSE OF SEMINAR

- RECENT DEVELOPMENTS ON SAFETY AND EFFICACY OF IMMUNIZATION

- OPERATIONAL SOLUTIONS TO PROBLEMS SHARED BY BOTH THE USA AND RUSSIA

- PRACTICAL TOOLS AND MATERIALS

- CURRICULA:

  - LISTS OF TRUE AND FALSE CONTRAINDICATIONS
  - RECOMMENDATIONS FROM INTERNATIONAL BODIES
  - POLICIES AND STANDARDS IN USA, ETC.

- REVIEW OPTIONS TO ENSURE EFFECTIVE IMPLEMENTATION OF SHORTENED LISTS OF CONTRAINDICATIONS

- FORGE LINKS DOMESTICALLY AND INTERNATIONALLY

- 40 SEMINAR PARTICIPANTS

- MEDICAL FACULTY TRAINING MEDICAL STUDENTS AND PEDIATRICIANS

- OPERATIONAL STAFF IMPLEMENTING AND ADMINISTERING IMMUNIZATION AND DISEASE CONTROL PROGRAMS

- THIS MIX OF ACADEMIC FACULTY AND OPERATIONAL STAFF RESULTED IN A RICH EXCHANGE OF EXPERIENCE AND DIVERSE PERSPECTIVES.

PRINCIPAL TOPICS

- RATES OF POST-VACCINATION COMPLICATIONS
- TRUE AND FALSE MEDICAL CONTRAINDICATIONS TO IMMUNIZATION
- IMMUNIZATION OF SICK CHILDREN
- IDENTIFYING AND REDUCING MISSED IMMUNIZATION OPPORTUNITIES
- OVERCOMING NEGATIVE ATTITUDES TOWARDS IMMUNIZATION

MATERIALS TRANSLATED INTO RUSSIAN

- "STANDARDS FOR PEDIATRIC IMMUNIZATION PRACTICES" (CDC)

- "GENERAL RECOMMENDATIONS ON IMMUNIZATION" (ACIP)

- "GUIDE TO CONTRAINDICATIONS TO CHILDHOOD VACCINATIONS" (CDC)

- "6 COMMON MISCONCEPTIONS ABOUT VACCINATION AND HOW TO RESPOND TO THEM" (CDC)

MATERIALS TRANSLATED INTO RUSSIAN (CONTINUED)

- "MATERIALS FOR ENHANCING IMMUNIZATION CONTENT IN NURSING EDUCATION AND PRACTICE" (CDC, ATPM, ANA)

- "VACCINE-PREVENTABLE DISEASES CORE CURRICULUM OBJECTIVES" (IMMUNIZATION IN MEDICAL EDUCATION ADVISORY COMMITTEE, ATPM)

- "VACCINE SAFETY SURVEILLANCE: THE VACCINE ADVERSE EVENTS REPORTING SYSTEM" (CDC)

- EXCERPTS FROM *EPIDEMIOLOGY AND PREVENTION OF VACCINE-PREVENTABLE DISEASES* (CDC)

MATERIALS TRANSLATED INTO RUSSIAN (CONTINUED)

- "CHILDHOOD IMMUNIZATION SCREENING QUESTIONS." (CALIFORNIA DEPARTMENT OF HEALTH SERVICES)

- "ASSESSING THE CHILD WHO NEEDS IMMUNIZATIONS." *IMMUNIZATION OPPORTUNITIES*...THE FUTURE IS IN YOUR HANDS: A VIDEOTAPE AND USERS GUIDE ON IMMUNIZATIONS FOR REGISTERED NURSES AND PHYSICIANS (MICHIGAN NURSES ASSOCIATION)

- "POSSIBLE SIDE EFFECTS FROM IMMUNIZATIONS" (IMMUNIZATION ACTION COALITION, ST. PAUL, MINN.)

MATERIALS TRANSLATED INTO RUSSIAN (CONTINUED)

- "CASE STUDIES ON MEDICAL CONTRAINDICATIONS TO IMMUNIZATION" (CALIFORNIA NURSES ASSOCIATION AND CALIFORNIA DEPARTMENT OF HEALTH SERVICES)

- "WHEN TO IMMUNIZE AND WHEN TO WAIT: A VIDEO GUIDE FOR IMMUNIZING INFANTS AND TODDLERS" (CALIFORNIA DEPARTMENT OF HEALTH SERVICES WITH TECHNICAL INPUT FROM CDC)

CONCLUSIONS

- BRINGING TOGETHER OPERATIONAL STAFF WITH PROFESSORS FROM MEDICAL INSTITUTES WAS EXCELLENT IDEA

- STAFF CRAVE GREATER ACCESS TO WORLD'S SCIENTIFIC DEVELOPMENTS CONCERNING IMMUNIZATION

- NEED FOR MORE TRAINING MATERIALS ON VACCINE SAFETY, SIDE EFFECTS, AND CONTRAINDICATIONS

- NEED TO BASE POLICIES ON SCIENTIFIC EVIDENCE NOT ON UNFOUNDED MYTHS

- PROFESSIONAL ASSOCIATIONS AND EXPERT COUNCILS NEED TO PARTICIPATE WITH MOH IN FORMULATING POLICIES

CONCLUSIONS (CONTINUED)

- RUSSIAN GOVERNMENT SHOULD PLACE GREATER EFFORT ON PUBLICIZING NEED FOR AND IMPORTANCE OF IMMUNIZATION

- MEDIA HAS IMPORTANT ROLE AND SOCIAL RESPONSIBILITY IN PRESENTING TRUE FACTS ABOUT IMMUNIZATION

- DOCTORS NEED MORE POSITIVE INCENTIVES ("COOKIES"), AS OPPOSED TO ONLY NEGATIVE ONES ("WHIPS"), AND PEOPLE NEED TO TAKE GREATER RESPONSIBILITY FOR OWN HEALTH

CONCLUSIONS (CONTINUED)

- BETTER TRAINING OF NURSES AND NARROW SPECIALISTS IS NEEDED ABOUT IMMUNIZATION

- NEED FOR UNIFORM CURRICULUM TO TEACH ABOUT IMMUNIZATION

- NEED FOR VACCINATIONS TO BE COVERED BY HEALTH INSURANCE

- NEED FOR VACCINATION CARDS TO BE HELD BY PARENTS

- SURVEILLANCE OF ADVERSE EVENTS TO BE STRENGTHENED

- MODERN METHODS OF MONITORING, RECORDING AND FEEDBACK NEEDS TO BE TRIED TO REDUCE CONTRAINDICATIONS