

**FACTORS RELATED TO QUALITY OF EPIDEMIOLOGIC
SURVEILLANCE DATA (REPORT FORM 506) FROM
HEALTH CENTERS IN MUANG DISTRICT,
NAKHONSITHAMMARAT PROVINCE,
THAILAND**

Sarote Teerakul

**A Thesis Submitted in Partial Fulfillment of the Requirements
For the Degree of Master of Public Health Program In Health Systems Development
College of Public Health
Chulalongkorn University
Academic Year 2006
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Thesis Title Factors related to quality of epidemiologic surveillance data
(report form 506) from health centers in Muang District,
Nakhonsithammarat province, Thailand

By Mr. Sarote Teerakul

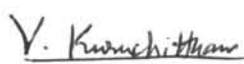
Field of Study Health Systems Development


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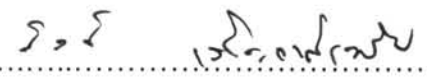
Accepted by the College of Public Health, Chulalongkorn University in
Partial Fulfillment of the Requirements for the Master's Degree


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PH: 032406: MAJOR HEALTH SYSTEMS DEVELOPMENT PROGRAMME
 KEY WORDS: COMPLETENESS / PROMPTNESS / ACCURACY / QUALITY OF
 DATA / EPIDEMIOLOGIC SURVEILLANCE REPORT

SAROTE TEERAKUL: FACTORS RELATED TO QUALITY OF
 EPIDEMIOLOGIC SURVEILLANCE DATA (REPORT FORM 506) FROM
 HEALTH CENTERS IN MUANG DISTRICT, NAKHONSITHAMMARAT
 PROVINCE, THAILAND. THESIS ADVISOR: ROBERT SEDGWICK
 CHAPMAN, M.D., M.P.H, 121 pp.

This analytical study was intended to evaluate the quality of epidemiologic surveillance forms (Form 506) received by the Muang District Health Office, Nakhonsithammarat Province, from 25 health centers in 13 subdistricts during 2004. Reports received were compared to health center data with respect to completeness, accuracy, promptness, and overall data quality. During 2004, a total of 831 report forms were received at the District. A total of 1,298 cases of reportable illness was found at the health centers. Health center personnel responsible for completing the report forms 506 were also interviewed, using a standardized questionnaire. In data analysis, each type of dependent variable (completeness, accuracy, promptness, and overall data quality) was analyzed against each type of independent variable (patient characteristics, type of illness, health center characteristics, location of health center, and calendar time). Dependent variables were analyzed as both continuous and categorical data, using appropriate statistical tests.

Overall rates of completeness, accuracy, promptness, and acceptable quality were, respectively, 60.6% (786/1,298), 39.4% (327/831), 64.4% (535/831), and 62.7%. Completeness and accuracy were inversely and statistically significantly associated with patient's age ($p < 0.001$). Experience with completing the report forms 506 was positively associated with completeness ($p < 0.001$) and overall quality ($p = 0.001$). Submission of forms by diskette was associated with significantly better completeness ($p = 0.003$) and overall quality ($p = 0.007$) than was submission as hard copy. A similar pattern was observed for receipt of support/feedback in performing job responsibilities, and for receiving supervision in epidemiology related activities. There were highly significant differences among subdistricts in completeness ($p < 0.001$), accuracy ($p < 0.001$) and promptness ($p < 0.001$) of report forms. Accuracy and promptness also differed significantly by calendar month ($p \leq 0.004$).

Based on study results, the main recommendations include: (1) quality should be improved, as should health workers' attitudes and understanding of the importance of epidemiologic surveillance; (2) encourage computerized data entry and report submission; (3) the health system should try to keep experienced personnel; (4) strengthen support/feedback and supervision in epidemiology; (5) educate health workers that surveillance is important for all age groups.

Field of study Health Systems Development

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ACKNOWLEDGEMENTS

I would like to thank Dr. Robert Sedgwick Chapman, M.D., M.P.H., my thesis advisor, and Dr. Vipat Kuruchittham, Ph.D., Thesis Examination Committee Chairman, for their encouragement and guidance throughout this project. I am also grateful to Committee member Rangsee Charoenwongrayab, M.Sc. for his valuable advice. I thank all health centers in the Muang District, Nakhonsithummarat Province, for their cooperation. I am grateful to Dr. Noppon Cheanklin, M.D. Director of the Provincial Public Health Office, and to Mr. Suppachok Kallhame and Ms. Sremsook Rattanasuwun for all their support, particularly for their useful suggestions regarding the interviews. I also thank Mr. Pittaya Tangklang and Mr. Nikon Khunthong for all their support from the beginning of the project.

My thanks go to Mr. Jeroj Bunlong, Muang Public Health Director, Ms. Weena Titiprasert, Nakhon Si Thammarat Provincial Public Health Office, for approval of this project and financial support. I also would like to thank all staff of Muang Public Health Office for their excellent cooperation in data collection and participation in this project.

Finally I want to give profound gratitude to my parents and all of my family members for their moral support and encouragement, which were essential in making accomplishment of my thesis possible.

Sarote Teerakul

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