

**UNIVERSITI SAINS MALAYSIA
GERAN PENYELIDIKAN UNIVERSITI
PENYELIDIKAN
LAPORAN AKHIR**

**Knowledge, attitude and practice and perception on the
transmission of influenza A (H1N1) epidemic in different
communities**

PENYELIDIK

PROF. MADYA DR. NORSA'ADAH BACHOK

PENYELIDIK BERSAMA

**PROF. MADYA DR. MUHAMMAD RUSLI ABDULLAH
PROF. MADYA HALIM SALLEH
DR. ZALIHA ISMAIL
DR. NIK ROSMAWATI NIK HUSAIN
DR. AZRIANI ABDUL RAHMAN**



USM

**UNIVERSITI
SAINS
MALAYSIA**

Ruj. Fail : USMKG/PPSP@/Pelantar Sains Klinikal (3)
Tarikh : 8hb. Mei 2012



Pusat Pengajian Sains Perubatan
School of Medical Sciences

Memorandum

Prof. Nor Hayati Othman
Dekan Penyelidikan
Pelantar Penyelidikan Sains Klinikal
Universiti Sains Malaysia

Kampus Kesihatan
Universiti Sains Malaysia,
16150 Kubang Kerian
Kelantan, Malaysia.
Tel: 609 767 3000
Fax: 609 765 3370
www.medic.usm.my

Prof.,

1. Laporan Akhir Geran Penyelidikan Universiti (RU)

**1.1 Prof. Madya Dr. Norsa'adah Bachok
(Unit Biostatistik & Metodologi Penyelidikan)**

"Knowledge Attitude and Practices and Perception on the Transmission of Influenza A (H1N1) Epidemic in Different Communities"

Dengan segala hormatnya perkara di atas dirujuk.

Bersama-sama ini disertakan **satu** Laporan Akhir Geran Penyelidikan Universiti (RU) yang dikemukakan melalui Pengerusi Jawatankuasa Penyelidikan dan Dekan, PPSP untuk tindakan Prof. selanjutnya.

Kerjasama Prof. dalam hal ini saya dahului dengan ucapan ribuan terima kasih.

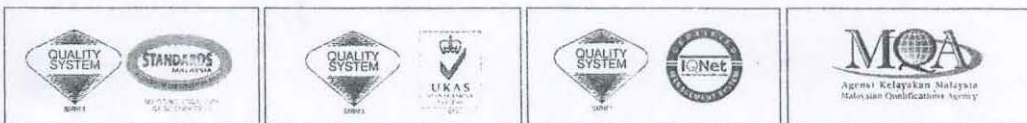
Sekian.

"BERKHIDMAT UNTUK NEGARA"
"Memastikan Kelestarian Hari Esok"

(MOHD ZAKI SELAMAT)
Pegawai Sains Kanan
Bahagian Penyelidikan, PPSP

- s.k. Dekan, PPSP] untuk makluman
- Timb. Dekan (Penyelidikan), PPSP] untuk makluman
- Penyelidik Berkenaan] untuk makluman

fn: sur2/_JK-P/ bio-per & kes./Sue



CERTIFIED TO ISO 9001:2008
CERT. NO. JAK-028



BAHAGIAN PENYELIDIKAN
Pusat Pengajian Sains Perubatan

BORANG PENILAIAN UNTUK LAPORAN AKHIR GERAN UNIVERSITI PENYELIDIKAN (RU)

NAMA PENYELIDIK : PROF. MADYA DR. NORSADAH BACHOK
 TAJUK : KNOWLEDGE, ATTITUDE AND PRACTICES AND PERCEPTION ON THE TRANSMISSION OF INFLUENZA A (H1N1) EPIDEMIC IN DIFFERENT COMMUNITIES
 NAMA PENILAI : PROF. MADYA DR. BAHARUDIN ABDULLAH

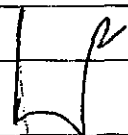
	Ada	Tiada	Ulasan Untuk Penilai
1. Latar Belakang	/		
2. Objektif	/		
3. Metodologi	/		
4. Hasil	/		2 manuscripts accepted for publication, 2 books published, 3 PG students, 4 UG students.

5. Keputusan Oleh Penilai (sila tandakan ✓ di kotak berkenaan)

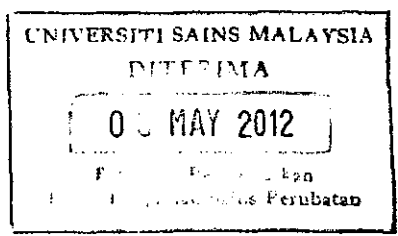
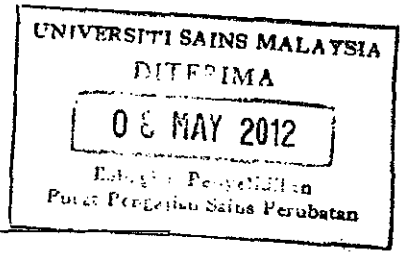
- Saya mengaku bahawa penilaian ini dibuat berdasarkan merit saintifik dan profesionalisma kepakaran saya tanpa ada kecenderungan kepentingan peribadi
- Saya istiharkan kepentingan saya dalam ruangan komen dibawah

Diluluskan
 Tidak Diluluskan

Komen : Good achievements.

Tandatangan Penilai :  **DR. BAHARUDIN ABDULLAH**
 Associate Professor
 Department Of Otorhinolaryngology
 School Of Medical Sciences
 Health Campus
 Universiti Sains Malaysia
 16150 Kubang Kerian, Kelantan.

Tarikh : 7th May 2012



Fn: bor penilaian lap akhir/ver.2/Ogos 2011

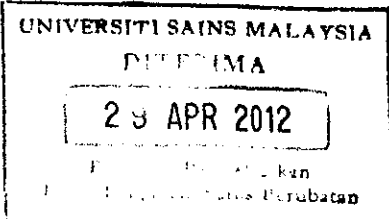
01/

**FINAL REPORT RESEARCH
UNIVERSITY GRANT**

**KNOWLEDGE, ATTITUDE
AND PRACTICES AND
PERCEPTION ON THE
TRANSMISSION OF
INFLUENZA A (H1N1)
EPIDEMIC IN DIFFERENT
COMMUNITIES**

1001/PPSP/812055

**ASSOC PROF DR NORSA'ADAH
BACHOK**



**UNIVERSITY RESEARCH GRANT
FINAL REPORT
Geran Penyelidikan Universiti
Laporan Akhir**

A.	PARTICULARS OF RESEARCH / MAKLUMAT PENYELIDIKAN:
(i)	Title of Research: <i>Tajuk Penyelidikan:</i> KNOWLEDGE, ATTITUDE AND PRACTICES AND PERCEPTION ON THE TRANSMISSION OF INFLUENZA A (H1N1) EPIDEMIC IN DIFFERENT COMMUNITIES
(ii)	Account Number: 1001/PPSP/812055 <i>Nombor Akaun:</i>
B.	PERSONAL PARTICULARS OF RESEARCHER / MAKLUMAT PENYELIDIK:
(i)	Name of Research Leader: <i>Nama Ketua Penyelidik:</i> Assoc Prof Dr Norsa'adah Bachok
	Name of Co-Researcher: <i>Nama Penyelidik Bersama:</i> Assoc Prof Dr Muhammad Rusli Abdullah, Assoc Prof Halim Salleh, Dr Zaliha Ismail, Dr Nik Rosmawati Nik Husain, Dr Azriani Abdul Rahman
(ii)	School/Institute/Centre/Unit : <i>Pusat Pengajian /Institut/Pusat/Unit :</i> School of Medical Sciences
C.	Research Platform (Please tick (/) the appropriate box): <i>Pelantar Penyelidikan (Sila tanda (/) kotak berkenaan):</i>
	<input type="checkbox"/> A. Life Sciences <i>Sains Hayat</i>
	<input type="checkbox"/> B. Fundamental <i>Fundamental</i>
	<input type="checkbox"/> C. Engineering & Technology <i>Kejuruteraan & Teknologi</i>
	<input type="checkbox"/> D. Social Transformation <i>Transformasi Sosial</i>
	<input type="checkbox"/> E. Information & Communications Technology (ICT) <i>Teknologi Maklumat & Komunikasi</i>
	<input checked="" type="checkbox"/> F. Clinical Sciences <i>Sains Klinikal</i>
	<input type="checkbox"/> G. Biomedical & Health Sciences <i>Bioperubatan Sains Kesihatan</i>

D.	<p>Duration of this research : <i>Tempoh masa penyelidikan ini :</i></p> <p>*Duration : <u>2 YEARS</u> <i>Tempoh :</i></p> <p>From : <u>1 MAY 2010</u> To : <u>30 APRIL 2012</u> <i>Dari: Ke :</i></p>								
E.	<p>ABSTRACT OF RESEARCH (An abstract of between 100 and 200 words must be prepared in Bahasa Malaysia and in English. This abstract will be included in the Annual Report of the Research and Innovation Section at a later date as a means of presenting the project findings of the researcher/s to the University and the community at large)</p> <p>Abstrak Penyelidikan (Perlu disediakan di antara 100 - 200 perkataan di dalam Bahasa Malaysia dan juga Bahasa Inggeris. Abstrak ini akan dimuatkan dalam Laporan Tahunan Bahagian Penyelidikan & Inovasi sebagai satu cara untuk menyampaikan dapatan projek tuan/puan kepada pihak Universiti & masyarakat luar).</p> <p>See attachment</p>								
F.	<p>SUMMARY OF RESEARCH FINDINGS <i>Ringkasan dapatan Projek Penyelidikan</i></p> <p>See attachment</p>								
G.	<p>COMPREHENSIVE TECHNICAL REPORT <i>Laporan Teknikal Lengkap</i> Applicants are required to prepare a comprehensive technical report explaining the project. (This report must be attached separately) Sila sediakan laporan teknikal lengkap yang menerangkan keseluruhan projek ini. [Laporan ini mesti dikepikan]</p> <p>List the key words that reflectour research: <i>Senaraikan kata kunci yang mencerminkan penyelidikan anda:</i></p> <table border="1"> <thead> <tr> <th>English</th> <th>Bahasa Malaysia</th> </tr> </thead> <tbody> <tr> <td>Influenza A</td> <td>Influenza A</td> </tr> <tr> <td>H1N1</td> <td>H1N1</td> </tr> <tr> <td>Knowledge, attitude and practice</td> <td>Pengetahuan, sikap dan amalan</td> </tr> </tbody> </table>	English	Bahasa Malaysia	Influenza A	Influenza A	H1N1	H1N1	Knowledge, attitude and practice	Pengetahuan, sikap dan amalan
English	Bahasa Malaysia								
Influenza A	Influenza A								
H1N1	H1N1								
Knowledge, attitude and practice	Pengetahuan, sikap dan amalan								

H. a) **Results/Benefits of this research**
Hasil Penyelidikan

No. Bil:	Category/Number: Kategori/ Bilangan:	Promised	Achieved
1.	Research Publications (Specify target journals) <i>Penerbitan Penyelidikan</i> (Nyatakan sasaran jurnal)	2	2 accepted Several may follow
2.	Human Capital Development		
	a. Ph. D Students		
	b. Masters Students	2	3
	c. Undergraduates (Final Year Project)		2
	d. Research Officers		
	e. Research Assistants	1	2
	f. Other: UiTM Industrial Training Students		2
3.	Patents <i>Paten</i>	0	
4.	Specific / Potential Applications <i>Spesifik/Potensi aplikasin</i>	0	
5.	Networking & Linkages <i>Jaringan & Jalinan</i>	0	
6.	Possible External Research Grants to be Acquired <i>Jangkaan Geran Penyelidikan Luar Diperoleh</i>	0	

- Kindly provide copies/evidence for Category 1 to 6.

b) **Equipment used for this research.**
Peralatan yang telah digunakan dalam penyelidikan ini.

Items Perkara	Approved Equipment	Approved Requested Equipment	Location
Specialized Equipment Peralatan khusus	Audiotape recorder Printer	Did not buy	
Facility Kemudahan			
Infrastructure Infrastruktur	Perisian Nvivo	Did not buy	

- Please attach appendix if necessary.

I. BUDGET / BAJET

Total Approved Budget : RM 78,666
Total Additional Budget : RM 0
Grand Total of Approved Budget : RM 78,666

Yearly Budget Distributed

Year 1 : RM 52,672
Year 2 : RM 25,994
Year 3 : RM 0

Additional Budget Approved

Year 1 : RM
Year 2 : RM
Year 3 : RM

Total Expenditure : RM 74,954.75
Balance : RM 3,711.25

- Please attach final account statement from Treasury


Signature of Researcher
Tandatangan Penyelidik

30 April 2012
Date
Tarikh

H.

COMMENTS OF PTJ'S RESEARCH COMMITTEE
KOMEN JAWATANKUASA PENYELIDIKAN PERINGKAT PTJ

General Comments:

Ulasan Umum:

Project has been completed successfully and all objectives achieved. The output include two manuscript accepted for publication in South Korea Journal of Tropical Medicine & Public Health and International Medical Journal. Other outputs include one book & two Number of public Health. This report has been accepted by an independent reviewers and approved by PhD committee.

PROFESOR AHMAD SUKARI MALIM
Tindakan Dewan Penilaian PTJ
Pusat Penyelidikan Peringkat PTJ
Universiti Pendidikan Sultan Idris
37600 Tanjong Malim, Selangor

Signature and Stamp of Chairperson of PTJ's Evaluation Committee

Tandatangan dan Cop Pengerusi Jawatankuasa Penilaian PTJ

Date : 9/12/12

Tarikh :

PROFESOR ABDUL AZIZ BABA
Dekan

Pusat Penyelidikan Sains Perubatan
Kampus USM E-1
Universiti Pendidikan Sultan Idris
16150 Kubang Keruan, Melaka

Signature and Stamp of Dean/ Director of PTJ

Tandatangan dan Cop Dekan/ Pengarah PTJ

Date : 10-5-2012

Tarikh :

ABSTRACT OF RESEARCH

KNOWLEDGE, ATTITUDE AND PRACTICES AND PERCEPTION ON THE TRANSMISSION OF INFLUENZA A (H1N1) EPIDEMIC IN DIFFERENT COMMUNITIES

Influenza A (H1N1) was a new disease pandemic in year 2009. The aims of this study were to determine level of knowledge, attitude and practices and perception on the transmission of influenza A (H1N1) in different communities in Kelantan. Several mixed design studies were conducted. An intervention was conducted to evaluate the effectiveness of health education package on knowledge, attitude and practice towards influenza A (H1N1) infection in secondary school children. A total of 193 students in intervention group and 243 students in control group were involved. The health education package was effective in improving knowledge and attitude scores of students towards influenza A (H1N1). The second study aimed to determine level of knowledge, attitude and practices and factors related to practice among public, teachers and nurses. Job stress among nurses was also determined. Self-administered validated questionnaire was used to collect data. Public were visitors of USM Health Campus during our study period. Teachers were randomly selected from three secondary schools in Kota Bharu. Nurses of HUSM were randomly chosen. A total 250 public, 163 secondary school teachers and 523 nurses were included. Most participants had good knowledge, attitude and practice on H1N1. The third study was a retrospective study to determine the epidemiology of influenza A (H1N1) cases that had been admitted in HUSM. There were 93 cases enrolled with 44 (47.3%) patients presented with influenza-like-illness (ILI), 18 (19.4%) patients were suspected cases and 31 (33.3%) patients were confirmed cases of H1N1. The fourth study was focus group discussion conducted among school children (n=30) and nurses (n=28). Nurses had good knowledge and perceived well on the risk of influenza A (H1N1). However, the school children were lacking knowledge and had many misconception about the disease.

Key words: influenza A, H1N1, knowledge, attitude, practice

PENGETAHUAN, SIKAP DAN AMALAN DAN PERSEPSI MENGENAI PENULARAN WABAK INFLUENZA A (H1N1) DALAM KOMUNITI BERLAINAN

Influenza A (H1N1) adalah wabak penyakit baru dalam tahun 2009. Tujuan kajian ini adalah untuk menentukan tahap pengetahuan, sikap dan amalan dan persepsi mengenai penularan wabak influenza A (H1N1) dalam komuniti yang berbeza di Kelantan. Beberapa kajian reka bentuk campuran telah dijalankan. Intervensi telah dijalankan untuk menilai keberkesanan pakej pendidikan kesihatan mengenai pengetahuan, sikap dan amalan terhadap jangkitan influenza A (H1N1) di kalangan kanak-kanak sekolah menengah. Seramai 193 pelajar dalam kumpulan intervensi dan 243 pelajar dalam kumpulan kawalan telah terlibat. Pakej pendidikan kesihatan adalah berkesan dalam meningkatkan skor pengetahuan dan sikap pelajar terhadap influenza A (H1N1). Kajian kedua bertujuan untuk menentukan tahap pengetahuan, sikap dan amalan dan faktor-faktor yang berkaitan dengan amalan di kalangan orang awam, guru dan jururawat. Soal selidik yang telah disahkan telah digunakan untuk mengumpul data. Orang awam adalah pelawat Kampus Kesihatan USM dalam tempoh kajian. Guru telah dipilih secara rawak dari tiga buah sekolah menengah di Kota Bharu. Jururawat HUSM telah dipilih secara rawak. Seramai 250 orang awam, 163 orang guru sekolah menengah dan 523 jururawat telah dimasukkan dalam kajian. Kebanyakan peserta mempunyai pengetahuan, sikap dan amalan yang baik mengenai H1N1. Kajian ketiga adalah kajian retrospektif untuk menentukan epidemiologi pesakit influenza A (H1N1) yang telah dimasukkan di HUSM. Terdapat 93 kes yang berdaftar dengan 44 (47.3%) pesakit yang mempunyai gejala penyakit seperti influenza (ILI), 18 (19.4%) pesakit disyaki kes dan 31 (33.3%) pesakit disahkan kes H1N1. Kajian keempat adalah perbincangan kumpulan fokus yang dijalankan di kalangan kanak-kanak sekolah menengah (n = 30) dan jururawat (n = 28). Jururawat mempunyai pengetahuan dan persepsi yang baik pada risiko influenza A (H1N1). Walau bagaimanapun, kanak-kanak sekolah kekurangan pengetahuan dan mempunyai banyak salah tanggapan tentang penyakit ini.

Kata kunci: influenza A, H1N1, pengetahuan, sikap, amalan