



BORANG LAPORAN AKHIR
PROJEK PENYELIDIKAN
USM JANGKA PENDEK

NAMA PENYELIDIK:

DR. MOHD NAZRI BIN SHAFEI

TAJUK GERAN:

KNOWLEDGE, ATTITUDE AND PRACTICE (KAP) AND ASSOCIATED
FACTORS FOR LEPTOSPIROSIS AMONG TOWN SERVICE WORKERS
IN KOTA BHARU, KELANTAN

NO. AKAUN:
304/PPSP/6131614

1. Nama Ketua Penyelidik: <i>Name of Research Leader</i>	Dr. Mohd Nazri Shafei					
<input type="checkbox"/> Profesor Madya/ <i>Assoc. Prof.</i>	<input checked="" type="checkbox"/> Dr./ <i>Dr.</i>	<input type="checkbox"/> Encik/Puan/Cik <i>Mr/Mrs/Ms</i>				
2. Pusat Tanggungjawab (PTJ): <i>School/Department</i>	Jabatan Perubatan Masyarakat, Pusat Pengajian Sains Perubatan, USM kampus Kesihatan					
3. Nama Penyelidik Bersama: <i>Name of Co-Researcher</i>	1. Dr. Mohd Rahim Sulong 2. Dr. Nor Azwany Yaacob 3. Dr. Habsah Hassan					
4. Tajuk Projek: <i>Title of Project</i>	Knowledge, Attitude and Practice (KAP) and Associated Factors for <hr/> Leptospirosis among Town Service Workers in Kota Bharu, Kelantan <hr/>					
5. Ringkasan Penilaian/Summary of Assessment:	Tidak Mencukupi <i>Inadequate</i>		Boleh Diterima <i>Acceptable</i>		Sangat Baik <i>Very Good</i>	
	1	2	3	4	5	
i) Pencapaian objektif projek: <i>Achievement of project objectives</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
ii) Kualiti output: <i>Quality of outputs</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
iii) Kualiti impak: <i>Quality of impacts</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
iv) Pemindahan teknologi/potensi pengkomersialan: <i>Technology transfer/commercialization potential</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
v) Kualiti dan usahasama : <i>Quality and intensity of collaboration</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
vi) Penilaian kepentingan secara keseluruhan: <i>Overall assessment of benefits</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

6. 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).

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)

ATTACHED

7. Sila sediakan laporan teknikal lengkap yang menerangkan keseluruhan projek ini.

[Sila gunakan kertas berasingan]

Applicant are required to prepare a Comprehensive Technical Report explaining the project.

(This report must be appended separately)

ATTACHED

Senaraikan kata kunci yang mencerminkan penyelidikan anda:

List the key words that reflects your research:

Bahasa Malaysia

Leptospirosis,

pekerja khidmat perbandaran,

pengetahuan, sikap, amalan, prevalen

Bahasa Inggeris

Leptospirosis,

town service workers,

knowledge, attitude, practice, prevalence

8. Output dan Faedah Projek

Output and Benefits of Project

1. To develop a database on occupational leptospirosis. Currently there is limited local data on leptospirosis especially occupational related diseases.
2. Workers of MPKB are at risk for leptospirosis. This study will provide epidemiological data on risk of leptospirosis in high risk group (MPKB workers) which can be used further in formulation of National Guidelines on prevention of leptospirosis in Malaysia.
3. This study will identify the potentially modifiable risk factors for leptospirosis in MPKB workers that might also be able to be generalized to other risk groups. It is important in prevention and control strategies.
4. Leptospirosis is overlooked and underreported in Malaysia, as it is not a notifiable disease. With this study, it may be valuable as a basis to justify leptospirosis as a notifiable disease in Malaysia.

(b) **Faedah-faedah lain seperti perkembangan produk, pengkomersialan produk/pendaftaran paten atau impak kepada dasar dan masyarakat.**

State other benefits such as product development, product commercialisation/patent registration or impact on source and society.

NONE

* Sila berikan salinan/Kindly provide copies

(c) **Latihan Sumber Manusia**

Training in Human Resources

i) Pelajar Sarjana: **DR. MOHD RAHIM SULONG**

Graduates Students

(Perincikan nama, ijazah dan status)

(Provide names, degrees and status)

Master of Community Medicine (Occupational Health)

ii) Lain-lain:

Others

9. **Peralatan yang Telah Dibeli:**

Equipment that has been purchased

NONE


Tandatangan Penyelidik
Signature of Researcher

15. 6. 09

Tarikh
Date

1. BORANG LAPORAN HASIL PENYELIDIKAN

2. PENYATA PERBELANJAAN

BORANG LAPORAN HASIL PENYELIDIKAN
PPSP

Tajuk geran: Knowledge, Attitude and Practice (KAP) and Associated Factors for
Leptospirosis among Town Service Workers in Kota Bharu, Kelantan

Penyelidik: Dr Mohd Nazri Shafei

Jenis geran: Jangka Pendek

Tempoh geran: 2 tahun

Jenis laporan: Laporan Kemajuan Alatan di beli Ya:nyatakan.....


Laporan Akhir*: / / Tidak

OBJEKTIF SPESIFIK KAJIAN (sama spt dalam proposal asal)	SECARA RINGKAS TERANGKAN PENCAPAIAN/HASIL	OBJEKTIF TERCAPAI ATAU TIDAK
1. To determine the seroprevalence of leptospirosis infection among town service workers in Kota Bharu, Kelantan	The overall seroprevalence of leptospirosis was 24.7%. High seropositivity rates of leptospirosis indicate that town service workers are occupational risk group for leptospiral infection.	TERCAPAI
2. To assess the knowledge, attitude and practice (KAP) of leptospirosis among town service workers in Kota Bharu, Kelantan	Only 38 workers (12.8%) had ever heard about leptospirosis. In the KAP assessment, majority of workers had poor knowledge (87.2%) and unsatisfactory practice score (64.5%) whereas for attitude, majority of workers had satisfactory attitude score (64.9%). Workers' knowledge and practice was inadequate to protect them from leptospirosis infection.	TERCAPAI
3. To identify the factors associated with seropositive leptospirosis among town service workers in Kota Bharu, Kelantan	The significant factors associated with seropositive leptospirosis were those who live \leq 200 meters from river, present of rat in their house, and involved in gardening activity. Workers who practiced wearing boots while working, and washing hands with soaps after works had protective effect towards leptospirosis. There is close relationship between seropositive leptospirosis with occupational and environmental factors as well as recreational activities.	TERCAPAI

- Laporan Akhir perlu disertakan salinan manuskrip dan surat yang dihantar kepada mana-mana jurnal untuk penerbitan.

Nama Penyelidik Utama (PI): DR. MOHD NAZRI BIN SHAFEI

t.t.:



Tarikh: 15.6.09

UNIVERSITI SAINS MALAYSIA
JABATAN BENDAHARI
KUMPULAN WANG PENYELIDIKAN GERAN USM(304)
PENYATA PERBELANJAAN SEHINGGA 31 MEI 2009

Jumlah Geran:	RM	35,038.00	Ketua Projek:	Mohd Nazri Shafei, Dr
Peruntukan 2008 (Tahun 1)	RM	23,978.00	Tajuk Projek:	Knowledge, Attitude and Practice(KAP) & Associated Factors for Leptospirosis Among Workers of Kota Bharu Municipal Council(MPKB), Kelantan Malaysia
Peruntukan 2009 (Tahun 2)	RM	11,060.00	Tempoh:	15 Jun 2008 - 14 Jun 2010
			No.Akaun:	304/PPSP/6131614

Kwg	Akaun	PTJ	Projek	Donor	Peruntukan Projek	Perbelanjaan Kumpul Hingga Tahun Lalu	Peruntukan Semasa	Tanggung Semasa	Bayaran Tahun Semasa	Belanja Tahun Semasa	Baki Projek
304	11000	PPSP	6131614		2,048.00	-	2,048.00	-	-	-	2,048.00
304	14000	PPSP	6131614		900.00	887.61	12.39	-	-	-	12.39
304	15000	PPSP	6131614		-	-	-	-	-	-	-
304	21000	PPSP	6131614		480.00	5,625.73	(5,145.73)	-	1,864.30	1,864.30	(7,010.03)
304	22000	PPSP	6131614		400.00	-	400.00	-	-	-	400.00
304	23000	PPSP	6131614		150.00	54.10	95.90	-	9.30	-	86.60
304	24000	PPSP	6131614		-	-	-	-	-	-	-
304	25000	PPSP	6131614		-	-	-	-	-	-	-
304	26000	PPSP	6131614		-	-	-	-	-	-	-
304	27000	PPSP	6131614		21,060.00	10,317.70	10,742.30	-	1,612.30	1,612.30	9,130.00
304	28000	PPSP	6131614		-	-	-	-	-	-	-
304	29000	PPSP	6131614		10,000.00	12,241.40	(2,241.40)	-	2,965.00	2,965.00	(5,206.40)
304	32000	PPSP	6131614		-	-	-	-	-	-	-
304	35000	PPSP	6131614		-	-	-	-	-	-	-
304	A11559	PPSP	6131614		-	-	-	-	-	-	-
304	A11102	PPSP	6131614		-	-	-	-	-	-	-
					35,038.00	29,126.54	5,911.46	-	6,450.90	6,441.60	(539.44)

1. SALINAN MANUSKRIP

**2. SALINAN SURAT BUKTI PENGHANTARAN KEPADA
JURNAL**

ABSTRAK (BAHASA MALAYSIA)

Pengenalan: Leptospirosis dianggap sebagai penyakit zoonotik yang tersebar luas dan kini kembali muncul semula. Kajian ini dilaksanakan untuk menentukan sero-prevalen, mengetahui tahap pengetahuan, sikap dan amalan (KAP) dan menentukan faktor-faktor yang menyebabkan sero-positif leptospirosis dalam kalangan pekerja khidmat perbandaran di Kota Bharu, Kelantan. **Metodologi:** Satu kajian hirisan lintang telah dijalankan pada bulan Mei 2008 ke atas 296 pekerja perbandaran di Kota Bharu. Pekerja telah ditemuramah dengan menggunakan borang kajiselidik dan darah vena diambil bagi setiap peserta untuk tujuan ujian pengaglutinat mikroskopik. **Keputusan:** Semua peserta adalah lelaki Melayu dengan min umur mereka adalah 42.1 (SD 8.38) tahun. Sero-prevalen leptospirosis adalah 24.7%. Dalam penilaian KAP, majoriti pekerja mempunyai tahap pengetahuan yang lemah tentang penyakit leptospirosis (87.2%) dan mendapat skor amalan yang kurang memuaskan (64.5%). Analisis menunjukkan peserta yang mempunyai risiko yang tinggi terhadap pendedahan kepada leptospirosis adalah mereka yang tinggal ≤ 200 meter dari sungai, terdapat tikus di rumah, dan yang melakukan aktiviti berkebun. Pekerja yang memakai kasut but semasa bekerja, dan membasuh tangan dengan menggunakan sabun selepas bekerja mendapat kesan perlindungan daripada mendapat jangkitan leptospirosis. **Kesimpulan:** Sero-prevalen leptospirosis yang tinggi menunjukkan pekerja khidmat perbandaran adalah golongan pekerja yang berisiko tinggi untuk terdedah kepada leptospirosis. Tahap pengetahuan dan amalan yang rendah dalam kalangan pekerja menyebabkan pekerja terdedah kepada penyakit leptospirosis. Faktor-faktor risiko yang telah dikenalpasti, mempunyai perkaitan rapat dengan pekerjaan, persekitaran dan juga aktiviti-aktiviti rekreasi.

ABSTRACT (ENGLISH)

Introduction: Leptospirosis is presumed to be the most widespread re-emerging zoonotic disease in the world. This study was designed to determine the seroprevalence, explore the knowledge, attitude, and practice (KAP) and to determine the associated factors for seropositive leptospirosis among town service workers in Kota Bharu Municipal Council (MPKB), Kelantan. **Methods:** A cross sectional study was conducted in May 2008 among 296 town service workers in Kota Bharu Municipal Council. Workers were interviewed using a validated questionnaire and venous blood was taken from each subject at their workplace for microscopic agglutination test (MAT). **Results:** All respondents were Malay males with the mean age of 42.1 (SD 8.38) years old. The overall seroprevalence of leptospirosis was 24.7%. In the KAP assessment, majority of workers had poor knowledge (87.2%) and unsatisfactory practice score (64.5%). The significant factors associated with seropositive leptospirosis were those who live ≤ 200 meters from river, present of rat in their house, and involved in gardening activity. Workers who practiced wearing boots while working, and washing hands with soaps after works had protective effect towards leptospirosis. **Conclusion:** High seropositivity rates of leptospirosis indicate that town service workers are occupational risk group for leptospiral infection. Workers' knowledge and practice was inadequate to protect them from leptospirosis infection. There is close relationship between seropositive leptospirosis with occupational and environmental factors as well as recreational activities.

Abstract

A cross sectional study was conducted to assess the knowledge, attitude and practice (KAP) on leptospirosis among 296 town service workers in Kota Bharu, Kelantan. Workers were interviewed using a validated questionnaire consist of demographic data as well as knowledge, attitude and practice questions. Data were analyzed using SPSS version 12.0.1 software. All respondents were Malay males with the mean age of 42.1 (SD 8.38) years old. The mean duration of employment was 15.6 (SD 8.62) years. Majority of workers had poor knowledge (87.2%) and unsatisfactory practice score (64.5%). In contrast, 64.9% of workers had satisfactory attitude score. In Conclusion, identified weakness was noted in knowledge as well as in practice level. The findings of this study suggest that health promotion for town service workers could be improved and warrant for further and special attention.

Keywords: *Town service workers, leptospirosis, knowledge, attitude, practice*