

THE MIZORAM

PHARMACISTS

Vol.6

2012-2013

Theme: Pharmacists in Public Health



A magazine published by Mizoram Pharmacists' Association
in collaboration with Mizoram State Pharmacy Council
in commemoration of 51st National Pharmacy Week



Pharmacist in Public Health

THE
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2012 - 2013

A magazine published by
MIZORAM PHARMACISTS' ASSOCIATION
in collaboration with
MIZORAM STATE PHARMACY COUNCIL

THE MIZORAM PHARMACISTS 2012-2013

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LAL RINLIANA SAILO
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MESSAGE

Mizoram Pharmacists' Association-in National Pharmacy Week-cum-General Conference a hmang thei hi ka lawmpui a. Chumi denchhena The Mizoram Pharmacists Annual Magazine Volume-6-na tihchhuah a ni thei hi lawmawm ka ti hle a ni.

Kumin National Pharmacy Week thupui 'Pharmacists in Public Health' tih hian awmzia thuk tak a nei a, Week hmangtu zawng zawngten vantlang mipui tana kan pawimawhzia inhriat chhuah thar nan i hmang theuh ang u. Hriselna tha kan nei theih nana Pharmacist-te pawimawhna hi ram hmasawn leh hnam fing apiangin hre chiangin, tangkai taka an thiamna hman a nih theih nan an pawimawhna hmun dik takah chanvo an pe thin a ni. Damdawi lam luhchilh a, zirna bik Pharmacy course-in a pek ang pe ve course dang a awm loh avangin Pharmacist-te chu 'Expert on Drugs' tia sawi hial thin an ni reng a ni. Chutiang mi vawiinah kan ramin mi eng emaw zat a nei ve ta che u hi lawmawm ka ti a, ram mipuite hriselna chawikang tura hmalaknaah in thlamuanpuiawm ka ti khawp mai. Amaherawhchu, khawvel inlumlet chak takah hian damdawi khawvel pawh a thang chak hle mai a, khawl thar, hmanraw thar leh damdawi thar a chhuak reng a. Chung thil hre thiam zel tur chuan intuai thar a; phak ang tawk tawka inzir thar reng a tul tih hi vawng tlat turin ka duh che u a, damdawi lam kawnga kan thiam bikna te mipui tana tangkai thei ang bera hmang turin Pharmacist zawng zawngte ka fuih duh bawk che u a ni.

Annual magazine changkang tak buatsaih a ni thei hi lawmawm ka ti a, a buaipuitute fakawm ka tiin, a chhiartu apiangte tana malsawmna hlu tak ni turin duhsakna ka hlan e.

(LAL RINLIANA SAILO)



ESTHER LAL RUATKIMI
SECRETARY
TO THE GOVT. OF MIZORAM
HEALTH & FAMILY WELFARE DEPTT.



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MESSAGE

I am happy to learn that Mizoram State Pharmacy Council and Mizoram Pharmacists' Association are observing National Pharmacy Week 2012 and in commemoration of this event they are publishing 'The Mizoram Pharmacists Annual Magazine 2012-2013'. I congratulate the Editorial Team who have worked hard and prepared this magazine. I sincerely hope that all the readers will be benefitted through the articles.

I wish the Pharmacists' Association the very best in future and hope that it will continue its good works.


(ESTHER LAL RUATKIMI)




LALSAWMA PACHUAU
PRESIDENT
MIZORAM STATE PHARMACY COUNCIL

MESSAGE

Mizoram State Pharmacy Council leh Mizoram Pharmacists' Association tangkawpin, National Pharmacy Week hmang tura hma kan la leh thei hi a lawmawm ka tiin, hemi atana tha leh zung sengtu zawng zawng chungah lawmthu ka sawi tak meuh meuh a ni. Kumina kan thupui '**Pharmacists in Public Health**' tih a ni zui leh zelte hian Mizoram mipuite fimkhurna thuchah min siam se, damdawi ei mai mai leh damdawi tha leh him ngaihtuah ve nachang min hriattir se a va duhawm em! Chutih rual chuan keini Pharmacists-te ngei hian rilru leh thinlung taka ngaihtuahin he kan thupui hlawhtlinna tur hian keimahni hma theuhah inpekna thar leh fimkhurna, taimakna min pe theuh sela, a va hlawhtlinthlak dawn em!

Kan magazine, '**The Mizoram Pharmacists 2012-2013**' tihchhuah theih a ni lehzelte hian kan thawhhona thatzia leh tumruhna a tilangin ka hria a, hemi phênah hian mi bik, thawkrim fál leh hah bikte pawh an awm; anni zára hetiang puitlin thei chauh hi kan ni tih erawh hriatchian hle a ngai thung. An chungah lawmthu ka sawi a, article tha tak tak thawhtute zarah tunlai khawvél tukverh atangin Pharmaceutical Services hmasawna tak tak kan thlirho leh thei dawn ta a nih hi.

Ka lawm e.



(LALSAWMA PACHUAU)

EDITORIAL

Kei ve tehlul tiin bul han tan tawp ila - chanvo ropui tak mai ka koah a tla a, ka ngaihtuah thiam lohzia leh ka tangkai nepzia lah ka inhre chiang hle mai. Mahse hei le, a lo puitlin meuh chuan Pathian leh mite hlutzia lanchhuahna ropui tak mai a lo ni ta hlauh zawk a. Thawhhonain a rahchhuah tihlanna ropui takah a lo chang ta a, a lawmawm takzet a ni.



Mihring tan chuan dam a hlu em em a, chutih rual chuan dam mai piah lamah hrisel taka dam tluka hlu a awm kher lo ang. Keini Pharmacist-te hian kan hna kan kova inngat tlat, kan thiamna phu ngeia tlin taka thawh a, mite tana an hriselna tur leh damna kawnga hrilhfak hi kan mawhphurhna a ni tih hriain, rawn tlak 'Pharmacists' nih tum tlat ila, khawvel thiamna lo thang chho zel milin kan thiamnate hi lo chher hriam ve zelin kan hlutna hi vawn nun zel i tum tlat ang u.

Kan kumte a lo tam zel a, kan thiamnate pawh a lo chuai tan ta nia kan hria a nih pawhin zam mai loin he Profession hlu tak neitu kan ni hi inchhuanna tham a tling tawh reng a ni tih hriain, kan senior-te chungah pawh Zahna Chibai ka han buk nghal bawk che u a, kan hriat ve phak loh leh hmuh pawh kan hmuh ve phak loh thiamna tam tak lo nei tawh leh lo khawih tawhtu te, 'Doctor awm lohnaah pawh' zam ngai lo in ni tih kan hre reng fo ang. Keini naupang zawkte tan in hlu takmeuh a, in thiamnate engtikah mah a hlui ngai lo vang.

Hmawlh sin te te tawnkhawm chu pakhat chauh ai zawngin a lo chak ta viau angin leh, thusawi chauhin awmzia a neih loh a, hla chauh pawhin kan duh a lam chhuak zo si lo ang bawk hian 'Thu leh Hla' thiam tak takten anmahni irawm chhuak ngeia an duh tak an han puh chhuah ngei han chhiar ham ham tluka hlu leh manhla hi a awm dawn em ni le... An thiamnate ui leh hup bet tlat lova 'articles' tha tak tak lo thawhtute chungah lawmthu awm sela, sum tam takin a lei zawh loh thiamna neite avang chauha he lehkhabu hi puitlin thei kan ni.

Thuchah (message) tha tak mai min hluitute chungah pawh kan lawm em em a, in inpekna, in thiamna leh finna mi dang tan malsawmna a ni ngei ang.

Tin, an tel lova kan puitlin theih lohna tur, ui hauh lova advertisements min petute hi an thilphal rah kan seng a, lawm a tikim leh zel. Pharma chungkua min tichanglungtute an ni tih kan hai lo a, kan lawm kum tin mai a nih hi.

Heng zawng zawngte a lo hlawhtlinna chu keini Pharmacist-te hi kan ni leh zel a, member-te tel loin engmah a ni dawn si lo va. Kan thawhhona te, kan inpumkhatna te a ropui a, kan chhawm nung reng tur pawh a ni dawn lo'm ni?

PHARMACISTS OATH

I Swear by the code of Ethics of Pharmacy Council of India in relation to the community and shall act as an integral part of health care team.

I shall uphold the laws and standards governing my profession.

I shall strive to perfect and enlarge my knowledge to contribute to the advancement of pharmacy and public health.

I shall follow the system, which I consider best for pharmaceutical care and counselling of patients.

I shall endeavour to discover and manufacture drugs of quality to alleviate sufferings of humanity.

I shall hold in confidence the knowledge gained about the patients in connection with professional practice and never divulge unless compelled to do so by the law.

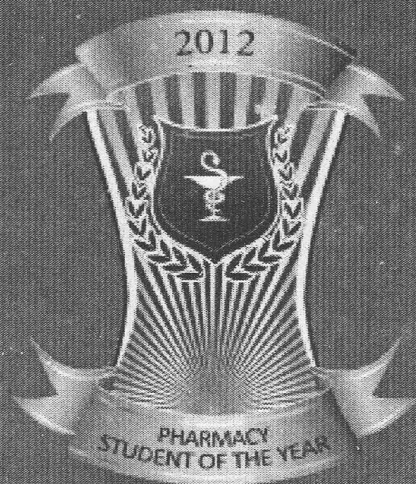
I shall associate with organizations having their objectives for betterment of the profession of Pharmacy and make contribution to carry out the work of those organisations.

While I continue to keep this Oath inviolated, may it be granted to me to enjoy life and the practice of pharmacy respected by all, at all times!

Should I trespass and violate this oath, may the reverse be my lot!

S.L. SAILO PHARMACY AWARD

AWARDED TO
LALTHASANGI



PHARMACY STUDENT OF
THE YEAR 2012

MIZORAM PHARMACISTS' ASSOCIATION

General Secretary Report



Lalhmingliana
General Secretary
Mizoram Pharmacists' Association



It is a great honour and privilege to once again have an opportunity to put forward a brief report of the activities and achievement of Mizoram Pharmacists' Association during the year 2012.

At present Mizoram Pharmacist Association member is 256

The Mizoram Pharmacist Association elected its office bearers for the year 2011-2012 as follows—

2011-2012 MPA HRUAITUTE

SI No.	Name	Designation	Address of Profession
1	Dr. H. Lalhlenmawia	President	RIPANS, Zemabawk
2	C. Vanthuama	Vice President	Civil Hospital, Aizawl
3	Lalhmingliana	Secretary	CMO 'E', Aizawl
4	K. Lalremmawia	Joint Secretary	CMS, Zemabawk
5	R. Rodingliana	Finance Secretary	Civil Hospital, Aizawl
6	Vanlalhluti	Treasurer	Govt Complex, Luangmual
7	Lalsawma Pachuau	Adviser	Dir. Of Health Services
8	F. Lalliantluanga	Adviser	P/S to Health Minister
9	C. Zoliana	Sr. Adviser	Ramthar, Aizawl

2011-2012 EXECUTIVE COMMITTEE MEMBERS

Sl No.	Name	Address of Profession	Phone No.
1	Lalvuana	Civil Hospital, Aizawl	9862809961
2	Lahmingliani Pachuau	MSACS, Mission Veng	9436142171
3	Zothanpuia	RIPANS, Zemabawk	9862305424
4	H. Zairemmawia	CMS, Zemabawk	9436366069
6	H. Vanlalruatthanga	Kulikawn Hospital	8974712151
7	Lalhuzauva	Luangmual Complex	9436154844
8	Lalbiakthanga	DHME	9436194299
9	J.R. Malsawma	Ramhlun North (Res)	9862364363
10	Lalbiakremi Fanai	Greenwood Hospital	9862119898
11	Lalnuntluangi Pautu	3rd Bn MAP, Mualpui	9436386656
12	C. Lahmachhuana	RIPANS, Zemabawk	9615556419

During the year 2012 there were 3 times Executive Committee meeting and 4 times Office bearers meeting.

The following are the general Activities of the Mizoram Pharmacists' Association during the year 2012.

1. National Pharmacy Week

The 51st National Pharmacy Week -2012 was held at Aizawl on 16 th November 2012 and was hosted by Mizoram State Pharmacy Council and Mizoram Pharmacists' Association. The programme was as follow :



MPA Office Bearers-te leh Senior Pharmacist-te

National Pharmacy Week - 2012

Theme : Pharmacists in Public Health

- Chief Guest : Pi Esther Lal Ruatkimi, IRS
Secretary, Health & Family Welfare
Govt. of Mizoram
- Comperre : RIPANS
1. Inauguration : 11:00 am
 2. Devotion : Pi Lalhmingliani
Executive Committee Member, MPA
 3. Condolence (Sunna) : Pu Lalhmingliana
General Secretary, MPA
 4. Key note Address : Pu Lalsawma Pachuau
President, MSPC
 5. Speech : Dr. H. Lahlhenmawia
President, MPA
 6. MSPC Annual Report : Released by President, MSPC
 7. Solo : Vanlalmalsawma
 8. MPA Annual Magazine : Released by Chief Guest
 9. Speech : Chief Guest
 10. SL Sailo Pharmacy Award : Pharmacy Student of the Year 2012 -
Lalthasangi awarded by Sanglura Sailo
 11. Distribution of Refresher Course 2012 Certificates : Registrar, MSPC
 12. Vote of thanks : Pu R. Rodingliana
Finance Secretary, MPA

2. General Conference - 2012

An annual General Conference was held at Tourist Lodge Aizawl on 16 November 2012 and the programme was as follow :

General Conference (Rorel)

Chairman : Dr. H. Lalhlenmawia, President MPA
Secretary : Lalhmingliana, Gen. Secretary MPA
Recording Secretary : K. Lalremmawia
Lalnuntluangi Pautu
Rosalind Zothanpuui

Order of business :

- 1) Introduction : President
- 2) Report :
 1. General Secretary
 2. Secretary, Sub Hqtrs, Lunglei.
 3. Finance Report
 4. 63rd IPC Report : Vanlalhluti

3) Business on Agendas:

4) Mizoram State Pharmacy Council member Election:

3. Publication of The Mizoram Pharmacist 2012-2013, Vol 6:

The Mizoram State Pharmacy Council and Mizoram Pharmacists' Association published its Annual Magazine 'The Mizoram Pharmacist' Volume 6 and was released on this auspicious day of National Pharmacy Week-2012 inauguration day on 16th Nov 2012. This magazine is freely distributed to the pharmacist and is circulated to the different libraries throughout the country and is widely circulated in Mizoram.

4. Sub Headquarters, Lunglei:

The MPA has a sub headquarters at Lunglei due to some problem arising from various corners it is not functioning properly since few years back. As a result of the visit from the MPA Headquarters on last year now it has been revived now by electing office bearers as follows :

President : H Vanlalnghaka
Vice President : Laltlanthanga
Secretary: Zohmingthanga Hnamte
Asst Secretary : K.Rothuama
Finance Secretary : Joshua Laltanpuia
Treasurer.: K.Lalawmpuii
Senior Adviser : 1)Dr K.Lalsanga 2) Vanneia Hnamte

5. MPA Golden Jubilee Celebration : On 11 Feb 2013 is our Association 50th Anniversary (Golden Jubilee) and Mizoram Pharmacists' Association is going to organised big events to commemorate this anniversary. An organising Committee was constituted last year and we look forward for the success of the coming jubilee. For this events a funds amounting to Rs 260000 was earmarked for this celebration. The events is highlighted as follows : Inaugural events will be hold at Aizawl on 11 Feb 2013, A scientific Session will be organised; an Essay /Article Writing competition will be organised for the students/public in which a cash award will be given to the best selected Article /Essay. A souvenir will also be published. A discussion programme will be broadcast in the Local TV channel an AIR. The maints events will be organised at the end of the year. All the members are requested to participate in this events for the success of this Golden Jubilee celebration.

6. Obituary:

As we march forward towards the betterment of the Pharmacist in Public health a heart rending tragedy shocked us with the untimely demise of the following Pharmacist

1. Our member Pu Kapkima(84) of Serkawn who served at the Christian Hospital Serkawn as a Pharmacist departed us on 14.8.12. A condolence meeting was held by MPA Sub Hqtrs Lunglei at his residence A sum of Rs 10000 was handed over to his bereaved family as a token of condolence

2. J. Ronghingliana (75) who served as a Pharmacist in the Gov't Hospital since 1958 till 1972 and when he was posted at Thingfal village he left the Gov't Job for doing a business till his demise on 26 May 2012. A condolence meeting was held by MPA Sub Hqtrs Lunglei at his residence. A sum of Rs 10000 was handed over to his bereaved family as a token of condolence

May their souls rest in peace and the God of Peace be with the bereaved family.



MPA General Conference 1986

DAMDAWI

CHUNGCHANGAH ZAWH DUH I NEI EM?

Damdawi ei kawp loh tur i hria em?

Damdawi i ei nghawng (side effect) eng nge?

**Damdawi i ei khan nghawng tha lo
(adverse effect) eng nge a neih?**

Damdawi engtia ei tur nge?

Damdawi i ei kha a hlauhawm em?

HENGHAH HIAN HARSATNA/ZAWH DUH I NEIH
CHUAN MONDAY-FRIDAY, OFFICE HOUR CHHUNGIN
PHONE NO. 0389-2306497-AH ZAWT LA,
AN LO CHHANG ANG CHE.

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KA HRINGNUN VEIKHAT

Lalhmingliani Pachuau
Quality Manager, MSACS

Kan Pharmacy Annual Magazine-ah article rawn thawh ve rawh ti a sawmna ka dawng a. I-he lovin, "Ka lo tum ang e," tiin ka chhang mai a. A hun a thleng dawn ta, ziak ve ngei chu ka duh si, mahse ka hul tlat. A chung thu chu sawi loh, a thupui tur takngial pawh ka haihchham der mai. Khawng kan Editor-te'n an phal zau bawka, ka'n nawi tak tak teh ang.

Ka hringnun zinkawng hi ziak dawn ila, Dibrugarh-a B.Pharm ka zirlai khan phekk eng emaw zat chu a awh ngei ang. Assam khawpui rauhsan tawh hnuchhawn ram lam pan chuan hriat ngai loh lamtluang chu kum 1996 kum tawp lam khan ka zaw h tan a. Chuta ka zuk tawn Zo hnahtlak leh Vai hnahtlakte, khawvelah hian an piang ve tih pawh ka hriat ngai lohte chu ka damchungka ka thian turte an lo ni reng mai. Ka thlen tirh chuan Mizo kan tlem si, inkawm hlim tham pawh kan awm lo. 1st year kan nih kuma ka lunglen theihzia kha aw... sawi hian a siak lo, haw leh mai chaknain ka khat. Baidaw-i te ho lah chuan an hrethiam ve der si lo. Tun angin mobile leh sms te la awm ve hek lo, 'via air mail' tih chuang lehkha kan dawn kha chuan intithe i takin thiante ho kan han hmuhtir a, nuam ve thei tak a ni.

Kan ute'n cinema en turin min hruai a, mahni inah pawh vai film en peih loh nak alaiin man chawia en chu ka phur lo thei khawp mai. Mahse intihhlimna dang awm hek lo, kan en ta tlut tlut mai a, senior deuh hnu pheichuan a hrat ber berah kan tang ta a. Chawhnu practical kan neih loh hlauh chuan dar 1 show en hman loh hlaua chet lak nghal a ngai a. Pakhatin Vai dawrah bag lo dah a, pakhatin tempo direct-a kal chhuak hmasa ber tur lo chan a ngai a. Chutah Amlapatty atangin cycle rickshaw-a kal lehin (rêlin kawng a kan loh chuan) dar 1 show kan va nang hman chiah thin. Mahse vanduaithlak taka rêlin kawng a lo kân hlauh chuan 'mission failed' a ni mai, pawh thei tak a ni.

Kan hostel chu Nalini Bala Devi Chhatri Niwas a ni a, a hming thui ang bawh hian a kawng pawh a thui vang vang khawp mai. Kan awm tirh chuan kawngsira Herhse ding tlar pêt maite kha mawi kan ti em em thin a, mahse Herhse chawrno vawi nga han hmuh meuh kha chuan Zothlifim dawn nghahhlelhna nen an mawina chuan Phuihnam par pawh a tluk

tawh lova, thlalara hnimbuk to ri re ang an changzo ta...

Kan hostel chu mi 200 vel zet lenna a ni a, a lian khawp mai. Thlahrang lah chu a tam phian lehngal a! Heng thlahrangho hi kan awm kim lai chuan an che tha duh der lo, Bihu chawlh laite kha an chet duh hun a nia. Tum khat Puja chawlh laiiin ekzam kan neih vangin kan haw ve thei lo va, mi 10 vel chauh kan awm a, kan hostel chu a reh ruih mai. Hlah ang ngeiin kan Bathroom hnaih ber chu a rawn hrang ta! Kan thian Arunachal-ho chem sei pui chu kan inchhawp ran mai a, bathroom-a kal dawn chuan pawn lamah mi pakhatin chemsei nen min lo veng thin a, vanneihthlak takin inbeihna lian tham a thleng lo hlah a. Ka naupan laia kan vengpa Pu Dailova hnena Kungfu ka lo zir lo kha ka inchhir thei khawp mai.

Chutia dar 1 show nan hman loh hlau reng renga kan phili lai chuan khawvel changkannain a ken tel internet hmanga MIRC32 Mizo chatroom kha a rawn lar chho ta a. Tunlai angin Mizoram chanchinbu internet atanga chhiar tur awm hek lo, kan kohhranin Thalai Tlangau min rawn thawn thin tih loh chu Mizoram chanchin chhiar tur a vang hle. Zoram ngaih tlema min chhâwk turin chatroom-ah chuan kan lut ve ta zeuh zeuh a. Duh aia rei awm a awl a, tlaiah hostel gate an khar hman hlau reng reng chung chuan chat tui a har khawp mai.

Assam ram kilkhawr - helho chet tamna hmuna awm kan nih vang nge - kan hostel chu an strict em em a. Tlai dar 6-ah an khar a, zan lamah chuan damlohna emaw, haw tur emaw, progamme

pawimawh a awm chauhin chhuah an phal a. Zan lam boruak tem ngai ta lo chu chhuahna chance a awm chuan nuam kan ti thei hle. University week lai hian warden phalna lak chuan chhuah an phal a. Ranghar Hall-ah Assamese hlanga drama competition enin zan tin kan chhuak ve a, tawng hriat thiam baw si loh chuan a hmuhnawm hranpa lo khawp mai, mahse kum khata vawi khat kan chhuahna chance a ni miau a!

Ka la hriat reng thin chu Duliajan kan kal kha a ni. Mizo kan thahnem ve deuh tawh a, Pharmacy leh Medical zirlai bakah PG, PhD zirlaite an rawn awm tawh a. Tin, Synod Missionary-te chhungkua an lo awm tawh baw a. Duliajan hi Assam ram oil leh gas laihchhuahna leh thlitfimna hmunpui a ni a, kan primary school kal laia Digboi kan tih thin kha chu tunah chuan hnuchhawn ram ni tawhin, helai hi an hmunpui a ni tawh a. A hmun tlawh tur chuan Mizo 10 vel kan thawkchhuak a. Kan awmna Dibrugarh atang chuan darkar 1 kal vel a ni a, langin a tlawh phak a. Duliajan-ah hian Mizo chhungkua 5 vel an awm a, oil company-a officer leh engineer te an ni hlawm a. Kan Mizo officer-te'n permit min lo buaipuina zarah a hmun kan tlawh thei a ni. A chhung chu a ropui hle mai. Lei chhung atanga oil an lakchhuah atanga an thlitfimna leh hralh tura an pekchhuahna thlengin a awm a. Gate 7 kal tlang a ngai a, gate pakhatah hian permit hran lak vek a ngai a, a thawktute pawh an awmna ni lo gate danga an luh dawn chuan permit lak tho a ngai a.

Duliajan-ah hian a hmunpui tih takah gas stove an hmang ve lo va, tui connection kan nei ang hian gas chu chhung

tinin pipe-in an in chungah an la lut mai a. Mizo thuk ang deuh hian a chhuanna an siam a, an hman zat chu a metre-in an teh mai a ni. Gas chu puan pho ro nan te, ai atan te an hmang mai a, heng laia gas a van vanga harsatna hi chu an hre vak lo, oil lipui chung a awm an ni miao a.

Ka hun kal tate ka chhui let a, Dibrugarh-a kum 5 ka awm chung khan tahna te; lunglenna te, inchhirna te tam tak ka nei a. Ka hun hman takte kha a hun lai chuan hrehawm ve deuh mah se khami hun kha ka tan chuan hun rangkachak a lo

ni. Mihring pangngai, rual pawl ve phaka min siamtu a ni a. Khata ka zirpuite leh ka hmelhriatte kha tunah chuan India ram hmun hrang hrangah hna tha tak takte thawk tawhin, han zin nikhuate pawhin ka tana mi tangkai tak takte an ni hlawm a. Tunah pheih chuan facebook hmangin an address leh phone number ka neih tawh lohte kha kan inbe leh thei a. A sur a sa tuar za a, a thlum a al ei zate kha Vankhawpuiah, lungduh zawng zawng an kim hunah tawn leh ni awm tak ang maw...? tite hian ka han dawn vel a...



We cannot rest until we make sure that our families can afford to live and raise their kids here, that our seniors can remain in their homes and afford their health and pharmaceutical costs.

- Carl Lewis

Today, nearly 40 percent of a senior's healthcare spending is on pharmaceutical medications.

- Dennis Hastert

The cause of most disease is in the poisonous drugs physicians superstitiously give in order to effect a cure

-Charles E. Page, M.D.

DAMDAWI MAKSAK

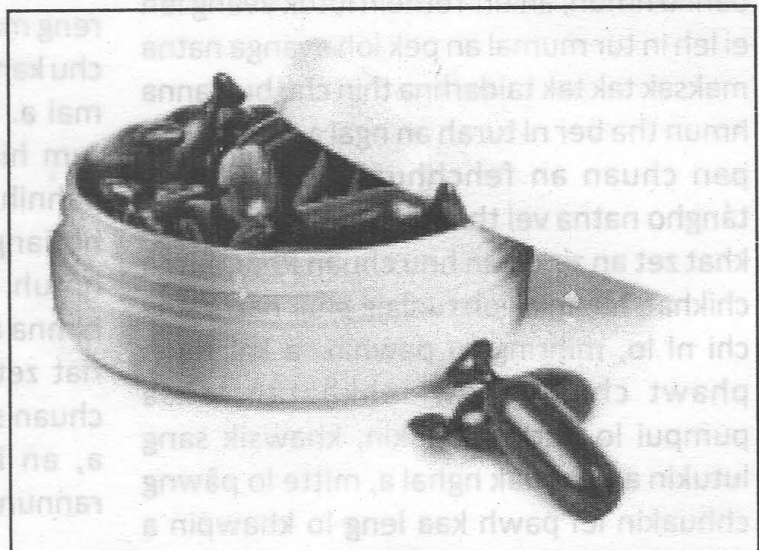
R.Lalchhuanawma

Tûk khat chu office kal tura ka insiam peih tawh hnuah thenawmpa'n, "Kan association-in magazine kan buatsaih dawn a, eng emaw rawn ziak ve teh a," a rawn ti a, a mi ngen derna chu tlanchiatsan chi ziazang niin ka hre si lo va, ka hul angreng viau bawk si. Zan muthmunah ka ngaihtuah chhunzawm ta a.

Tun hma (kan naupan ve lai ti ve tawh mai ang) kha chuan fehkawnga nau neih maite kha thil mak a ni hran lo va, tun hnuah ka han ngaihtuah lêt leh hian naupai laia enkawl na tha dawng awm reng reng ka hre lo; bawngpui naupaia paiin an hring ve tawp ni ta berin ka hria. Tunlai dinhmun nena khaikhin chuan khang hun laia mite khan engtin nge dam tak leh hrisel taka nau an neih theih chu aw tih vawng vawng tham a ni. Pumna, khawsik, kawthalo leh natna tinreng damdawi atan APC leh M and B number thum te an ni mai a, a bak beisei tur a awm chuang lo. Saphai mît leh Sakuh rîl kha an fak viau thin bawk. Naupang infiam an intihpem palhin nuin a kutah a chil a chhâk phawrh phawrh a, "Nu chil chu damdawi," tiin a pem laiah hnawih pahin a beng thawk thawk a, ngaihtha takin naupang chu a awm a, a dam ve leh mai bawk thin.

Europe lamah

Mizoram atangin mi sawmhnih rual zet kum nga chhung Europe ram hmun hrang hrangah natna kaih hnawih leh a damdawi chi hrang hrang zir turin sawrkar tirhin an feh chhuak a (a kum chiah ka hre thei ta lo), heng mite hian an zirlai an bei ngawrhin an thawk nasa em em a, an zingah hmeichhia panga an tel nghe nghe a. Natna enkawl dam harsa zual HIV-Aids te, Cancer leh Hipetitis-B te an thlur



bing a. Rim taka kum hnih zet an beih hnu chuan kan Mizo thalaite chu an duai loin, heng natna kan han sawite hi ni hnih khat lek chhungin an enkawl dam ta zung zung mai a. Kum engemaw zat Sapho finna leh khawl changkang maksak tak tak nen pawha an hmuhchhuah theih loh natna khirkhan enkawl dam theihna Mizovin kar lova an hmuchhuak ta mai chu mak an tiin an chung en nghal ta reng a, an chungah beiseina sang tak an nei nghe nghe a ni. Kum nga zir tur, chutah pawh hlawhtlinna an nei ang em tih pawh hriat phak loh, kum hnih leka an hlawhtling ta mai chu lawmawm an ti hle a. Kum thum chance an la nei bawk a, project chi hrang hrang insiam chawpin, Sapho sum leh pai leh an khawlte duh ang angin an hmang thei bawk a, mahni tuina lam lamah an insawrbing ta hlawm a.

Project dang

Mipaho chuan kan khawvel hun inher danglam zelah eng natnate nge mihring zingah lo la thleng thei ang tih zir chian chu an PROJECT a ni a. South America-a French Guinea-a tòn-in (prison) pakhat 'Bagne' an tih mai, misual turu bikte an dahna hmun, an tih-retheih lutuk avang leh ei leh in tur mumal an pek loh avanga natna maksak tak tak taidarhna thin chu bul tanna hmun tha ber ni turah an ngai a, chumi lam pan chuan an fehchhuak ta a. Chu'ng tángho natna vei thin chi hrang hrang kum khat zet an zir chian hnu chuan Phár natna chikhat, hmanlai leh tunlaia phár natna ang chi ni lo, mihring tu pawhin a kai tawh phawt chuan thawklekhatah taksa pumpui lo durh chhuakin, khawsik sang lutukin a tlakbuak nghal a, mitte lo pãwng chhuakin lei pawh kaa leng lo khawpin a

vûng nghal a, damchhuahna chance a awm lo. A tawi zawngin, tuitla ruang kar khat hnu vela vaukama hmuh hi an ang ber awm e. Chutiang natna chu tun atanga kum sawmpariatah khawvel hmun hrang hrangah a darh chiam dawn niin an hre ta a. Invawn thianghlim ringawta pumpelh theih chi a ni lo va, hritlang ang deuha leng darh tur a ni. Hei zet hi chu tihbaiawm lutuk, inven ngaihna awm lo a ni hial awm e.

Chu hri lo leng tur enkawl damna ngaihtuah chu thil huphurh awm lutuk ni mah se kan tlangval rualte cho phûrtu tha tak mai a ni a. New Guinea hual veltu tuifinriat chhunga rannung chi hrang hrang awmte an zir Chiang a, kumkhat zet a ral leh meuh chuan tuifinriat chhung km riat leh a chanve zeta thuka mi rannung chikhat, zoological term-a 'Qxbretyghjlpfz' an tih, Kg 9- zeta rit, utawk ang deuha bawl tuk mai, mei sei deuh deuh paruk leh mit ang deuh sawmthum pakhat nei, a taksa pawn lama han khawih chuan nal zuak mai chu zir chian atan a tha dawn hlein an hria a. A taksa pawn lam leh chhunglam an han zir chian hnu chuan natna lo thleng tur kan sawi tak venna tha lutuk mai tur hi a lo ni reng mai a, chu rannung an hmu thei hlahu chu kan tlangval rualte chu an lawm em em mai a. Hetiang rannung dang hmuh belh tum hian African mihàng sawmhnih leh pahnih, tui chung luh thiam an ruai a, hetiang chi hi sawmruk leh pathum an hmuh belh theih chuan khawvel pum himna atan a tawk turah an ngai a ni. Thla riat zet African-hoin an han zawn takah chuan sawmsarih pahnih zet an man thei a, an lawm tlang takzet a ni. Chu'ng rannung 'Qxbretyghjlpfz' chu chemical chi

hrang hrang nena chawhpawlhin, atom aia tein an tidip/tisawm vek a, mit lawnga hmuh theih chi rual a ni lo. An thil hmuhchhuah/siamthar chu satellite hmangin khawvel hmun tinah an thehdarh a, tun atanga kum sawm leh pariata hri tihbaiawm lutuk khawvela lo leng tur pawh chu an dang thei ta a ni. A sample hi Mizoram tan bik liau liau an humhalh a, ramdang mi tuma thàl theih rual loh tuikhurah an vawng tha tlat a.

Nulaho ve thung

Anniho hian khawvel kalphung pangngaia kum upat avanga 'tar' hun hi an enghelh em em a, tar theih lohna damdawi hmuhchhuah tumin ngawrh takin kum thum chung an zir ngat ngat a. Damdawi awm sa chi sangli leh sawmthum pathum chawhpawlhin damdawi chikhat 'Anti Oldage' an hmuchhuak a, capsule angin an siam a. He damdawi hi Cameroon pitar pakhat kum 86-a upa, tar kun khau tawh mai experiment atan an eitir chhin a. A ei atanga minute sarih leh a chanveah damdawi hnathawh lo lang tanin, a vun chuarte a lo mar a, a zangkùl te pawhrawn insiam ngilin minute sawmli pathum-ah chuan tleirawl kum 18 ang mai a lo ni ta a, an va han lawm tlang tehreng em! A hma lawka pitar kha a rawn tleirawl nuih ta ar ar mai a, a bul lawka putar kum 91 mi vel, lu

tuak var vek tawh chu a pasal niin a hre si, amah a inen a, a pasal a en leh a, mak tiin a hawi tawn sek a. Kan Mizo nulate chu a thiam ang tawh tawkin a pasal hnena damdawi pe ve turin a ngen chiam a. Anni lah chuan damdawi enchhinna tha lutuka ngaiin a dose chanve an pe a. Damdawi a ei atanga minute sawmhnih pathumah a lu tuak var vau tawh chu a rawn dum tan a, minute sawmsarih pahnih a ral meuh chuan a thawmhnaw hakte chu a táwn tet ta tuar tuar mai a, kum 35 mi ang velin a rawn lang ta vah mai. Nupui kum 18 mi a nei bawh nen, hlim tak an ni. An lawm lutuk chuan lawmman atan an Chawke khawi lai, Kg 3 zeta rit chu an pe nghe nghe a.

Thil buaithlak a lo thleng ta. Tlai lam dar nga velah an fate hna thawk an lo haw a, an nu leh pate aia lang upa zawk an ni ta nawk mai. Hun a kal zel a, thawmhnaw lamah harsatna an tawh chho ta zel. An fate aia a feng chhing chhing, a duh tui tui, a ha zuih zuih, a rim tui tui, Mobile handset man to to duh an lo ni ta! A tira an hlim vei nen, chhengkaw buai an ni zo ta.

Kan nulaten he buaina chinfelel theihna tur damdawi hmuhchhuah tumin rim takin an bei chhonzawm mek a, an thil hmuhchhuah ka hriat hmian ka thangharh ta hlawl mai, ka va ui!



VICTORIA HOSPITAL PHARMACY DEPARTMENT : BANGALORE

Vanlalhluti

B.Pharm, CH(A)

Hruaitute leh member te duhsakna avangin December 11, 2011 khan Aizawl chhuahsanin 63rd Indian National Congress, Bangalore, Karnataka-a hmang tura tih kan nih angin Aizawl kan chhuahsan a Function tan hma ni-in hun awl kan insiam a, Victoria Hospital (Vanivillas Hospital) Pharmacy Department tlawh turin kan kal a. He Hospital hi Karnataka Government hnuai Hospital lian ber a ni a. He Hospital hi a lianin a hmun vel pawh fan kual tham fe a ni. Khum 1000 vel awmna hospital a ni a, thawktu ni lo chu fan kual an phal vak lem lo va. Ka cousin Bangalore St. Martha Nursing College-a thawk chuan thian a lo neih hlauh avangin hei hi remchangah lain a. i chuan min fan kualpui ta a. Kan duh leh tum ber Pharmacy Department te chu min tlawh kualpui a.



A hmasa berin Outdoor Pharmacy Deptt kan tlawh a. Thawktute an felin kan hriat duhte min lo hrih thei zel a, a lawmawm khawp mai. Outdoor Pharmacy ah hian Pharmacist pahnih an lo awm a, a faiin an remfel em em mai a, entawn tlak tak an ni. A pawnah chuan fai leh chiang takin board várah an damdawi stock-te a hming, mfg date, expd date, etc. te chiang takin mi zawng zawng chhiara hmuh theih turin tarlan a ni a, hei hi entawn tlak tak niin ka hria. An taimain ni tin chu Drug Stock Board chu an update ziah bawk a ni. Damdawi an nei thain Physician-te damdawi chawh apiang, an neih chu a course ang zelin an pe chhuak thin a ni. Heng damdawi zawng zawngte hi State sorkarin a lei vek a ni a. Rual aw h a na duh hle mai.

Block thar, Indoor Pharmacy awmna lam kan pan leh a, tlem chuan kal thui a ngai ve deuh. Indoor Pharmacy chu lei hnuai temperature nuam tawkah an lo awmtir a, a lianin a ropui hle mai. Hospital pakhat Indoor Pharmacy tan chuan a lian tha taw hle a ni. Min hruaitu chuan Incharge Pharmacist chu a va bia a, ani'n remtihna min pek hnuah kan lut thei chauh a, mahse glass vek a nih avangin a pawn atang chuan thil tam tak a hmuh theih tho va. 2nd entrance bulah chuan bag leh thil dang kan kente min dahtir a, a chhungah chuan thawktu pali (4) an lo thu a, an faiin an hna an uluk hmel hle hlawm a. Room hrang hrang a awm leh a, chutah chuan tablets, liquid, injectable, etc. damdawi hrang hrang chu room hran theuhah a awm a, keini kal vang mai maia rem that an nih a rinawm loh. Engkim mai chu a felfai em em

mai a, mak ka ti angreng khawp mai. Mahni thawhna hmunte nen a khaikhin loh theih si loh va. Engkim mai hi store leh stock dan tur ang thlapa dah (rem) fel niin a lang. He an Indoor Pharmacy atang hian section hrang hrang Pharmacy-te chuan indent siamin an mamawh ang zelin. an lo lachhuak ve thin a ni.

Indoor Pharmacy kan fan kual zawh hian department dangte kan tlawh kual leh a, hei pawh hi sawi tham ve tak chu a ni. Section tin mai chuan Pharmacy Section hrang theuh an lo nei leh a, hetah hian a department-a hman tur bik damdawite chu stock a lo ni leh vek mai a. Heng section (department) tinah hian Pharmacist pahnih theuh an awm leh a, hei hi chawhnu leh chawhma an neih vang a ni a, anmahni sawi dan chuan chawh lâk duhte a awm ve thin si a, pahnih awm hi a ngai alawm an ti a ni. Tu pawh mai hi an felin biak an nuam em em mai a, Pharmacist thawktu ka hmuh zawng zawngte hi mipa pahnih tih loh chu hmeichhia vek ka hmu a ni. Section tin Pharmacy chu hmun remchang takah leh ualau lai leh a nuam lai an thlang emaw tih turin a nuam em em vek a, Mizoram nen chuan a inang lo hlein ka hria. An Pharmacy entrance bulah chuan board var lian tak a lo intar leh a, kan luh hma chuan kan chhiar leh zung zung a, an damdawi neih leh neih loh te (Print Drug name damdawi awm si lovah chuan Nil an ziak zel a) kim tak leh felfai takin an stock neih zat nen chiang takin a lo inziak leh tuar mai a, a van awhawm tak em. Mizoram Hospital Pharmacy-ah te hian tih ve theih ni se chuan hmasawna ropui tak tur niin ka ngai. Thawktute inpekna a ropuiin a entawn tlak

hleln ka hria. Nitin mai an stock-te pending lovin mi dang hmuh theih leh hriat theih turin an pho chhuak thei reng mai hi an fakawm hle a ni. Section tin mai hian room lian tawk an nei vek a, plan a tha hle mai. Damdawi lah chu duhthusamin section tin chuan an mamawh an nei tha em em vek mai a, neih loh tih chu a tlem hmel khawpin ka hria.

A tawp ber atana kan ziahlan duh chu - heng damdawi zawng zawng hnianghnar taka damloten an hman leh hmuh zawng zawng hi State sorkar lei vek

a ni e an tih hi a ropui hle mai. Tin, min hruaitupa pawh hian a thawhna hospital chu a hre chiang em em mai a, zui a nuamin a bengvarthlak hle a ni. Hetiang ang tak hian kan thawhna hospital theuhte hi hre chiangin kan hna chanpual theuhte rinawm tak leh thahnemngai takin thawk theuh thei ila a va lawmawm dawn em ka ti a ni. Keini Kristian sakhua betu intite ai hian sakhaw dang biate hi an hnaah an rinawmin an taima emaw ni chu aw tih rum rum a awl dawn khawp mai.

Ka lawm e.



My father wanted me to be a pharmacist like himself. He had been a doctor, but he no longer believed in medicine; so he became a pharmacist, but he believed in that hardly more

- Claude Chabrol

While I have served in public office for 30 years, my professional training is as a pharmacist, not a lawyer or an accountant

- George Ryan

There are three legs of responsibility. Your doctor, your pharmacist and you

- Terry Seaton

Ka awm loh hunah pawh

Thlanthla Peuleu

Dam lai pialral chu thih hnu khawvelah hmu theiin kan inring thin a, pialral kan ngai a, kan chhingmittui a hul thei lo fo thin a nih hi; chu chu mihring nunkhua, chatuan atana a tira dah lawk chu a ni. 'Pialralah tal' inti thin he mihringte khawvelah hian nun hlimthlá min hmuhtir a, ka tana chawlhna 'hmun khawhar' min siamsak thintu mi pakhat, ka hmangaih em em a awm a, a hming chu Didi a ni.

Hmun khawharah chuan min lo mikhual thin a, ni eng hi a eng bik a, thawnthu ngaihnaawm tak aiin kan nun chu a ngaihnaawm zawk a, hmuh ngai loh thian kan ni a, hmangaihna hmingchhala kan din kan khawvel zimteah chuan chawlh hi a nuam a, thlifimte hi an vâwt reih asin. Didi, ngaithla teh, thlifimte chuan kan lehkhabu hi an chhiar asin.

Didi, i nuna ka rawn lan tirh kha thlasik khawvawh em em lai a ni a, thlasik zinkawng chu zawh dunin zan khawvawt hnuaiyah hmangaihna thawnthu kan sawi a, arsate khawvel mawizia te kan hril a, hahtdam em emin kan nui dun a nih kha. Mak takin kha kan khawvel kha midang hriatthiam theih reng reng loh turin hmanhmawh takin a intan a, khawvel ruala kal pawh duh mah ila kan thei tlat lo va, khawvel aia chak hret



zelin kan tlan a, mahse kan inlungual a, kan hlim thinzia kha aw. Kan thawnthu kha zan khawvawtah, thlasik daifimte hriatpuiin kan ziaak a, arsike khian an nemnghet a, zing khawvarte hian a dik a ni tin an puang asin.

Ka tan tling lova i inhriat tlatna khan wawi tam tak chu ka pianna ngaiah min kirtirin tu nge ka nih ka inzawt nawn fo a, i tan hian ka tling a nih chuan ka tan i tlin lohna reng reng ka hre ngai lo. Kan lo inhre har lutuk kha a paw hi ka ti vawng vawng thin a, zawhna chhanna awm lo hi wawi tam tak ka inzawt a, ka tel lova i hun ral ta tam tak kha ka ui thin a ni. Ka tap ngai lo ti mah la i tap thin tih ka hai lo va, hlim taka awmtir che hi kha kan inhmuh hmasak ber ni atanga ka thiltum lian ber a ni nghal a, mihring ve tho i nih avangin i khua a harin i lung a leng thin tih pawh ka ring a, i nunah hian chhimbam zamtir ka tum ngar ngar thin. I hlim nui hmel hi mawi ka tizual em em thin a, hlim taka i nui ri hi ngaihnaawm bikin ka hria a, i thlalakahte pawh i nui laite chu wawi tam ka en thin.

Mi ngaisang mai mai duh lo inti ve thin kha ka ni a. Hmeichhia dahsang duh ngai lem lo mi ka ni! Mahse ngaihsanna che ka nei, ka ngaisang che asin Didi. A chhan min zawt lo la, hei vang hian a chang chuan kan buai thinin ka hria! Hla-ah pawh hla mawi ber chu i tan ni se ka duh a, i tana hla ka phuahte hian ka sawifiah zo loin ka inhre fo a, ka insit em em thin. An mawi taw lo vang tih hi ka hlau thin a, wawi tam tak ka siamtha thin asin. 'Didi' ka tih hmasak ber tum che kha i la hria em? A thlûk kha mawi i ti vak lo va, mahse ka tan chuan Didi i ni miau a, a thlûkah ka buai lo va, i inhmeh ka

ti em em a, lungsi em emin ka ko thin che a, dik tak chuan ka uang a ni. Ka nu leh pa kianga thlamuang taka ka kalsan ngam hi he khawvelah hian nangmah chauh i la ni tih hria la ka duh. Chu chuan ka ring che tih a kaw k satliah lo va, ka tana i hlutna te, i pawimawhna te an hriat asin.

Ka ngaihtuah thin a. Nula leh tlangval leng siau siau karah hian kan ingaina fal bik a, nun hi nuam kan ti bik a, kan inring tawka, khawvel nen kan nun chu thleng kan huam fo a, hetah tak hian kan inhmangaihna hi a chhuanawm ka ti thin a, hmangaihna dik a ni tih huaisen takin ka tan ngam a ni. Hmangaihna hi ka dahsang em em a, mihringte hian kan hria a, mahse kan puitlin zo loin ka hre ve mai mai thin a, mahse nang leh keiah hian a puitling chu hmuh theihin a awm foin ka hmu a, ka lawm a, ka uang a, engmah ni lo mah ila kan ropui riau hian ka hre thin. Midang tel lo pawhin nun hi kan zuam a, harsa tak pawha mihring nih hi kan huam a, kan inhmangaihnaah chuan chung chu a tel avangin khawvela mi ropui ber ni lo mah ila kan ropui ka ti a ni.

Kan ngaihnaawm ka ti thin. He khawvelah hian inhmangaih tam tak an lo tlu hlum tawh a, inhmangaih tam tak an lo inthen tawh bawka, nang leh kei hian ngaihnaawm takin he hringnunah hian neitu nihna hmangaihna hmingchhalin kan nei vein ka hre thin. I kiangah chuan ka pangchang leh tlat thin a, ka hna atanga ka lo haw-a i bul ka thlen te hian ka hah ta riau te hian ka inhria a. I bulah hi chuan khawvel hi a naupanga, a hlimawm a, ka tan a lehpek khawvel a awm lo. Ka hmangaih, ka khawvel, ka nun, ka hahdamna, ka in i ni

Didi. I hmangaih nih hi a nuam a, a chhuanawm a, a famkim bik a ni. Nau ang kan nuar a, chhun leh zan hi kan palzut fo va, thim leh eng hian min thunun zo lo fo thin. Kan harsatna kara kan hlimnate hi keini chauh lo chuan an tem ve dawn reng reng lo va, chuvangin kan ngaihnaawm bik a, kan nunkhua hi a nuam a ni.

Thlipuite chu tlehin he kan nunkhuaah hian ruahpui vanawnte chu sur fo mah sela, mawi em emin zingah ni a la chhuak leh thin ang tih ka ring a. Thlipui pawhin a tlûkpui zawh loh he kan inhmangaihna in hi ding reng sela, thlifim tleh zingah chuan rimawi ngaithla ila, sirvate zai saknaah chuan nun thing thiang

va din ila, khaw ropui ni loin khaw hahdam siam ila, chutah chuan i chawh ang Didi.

A tawp berah chuan ka hming i lam huna awm loh hi ka duh ngai lo va. I tan chuan ka hun pawimawhte hi an pawimawh zo lo va, eng tik hunah pawh keimahah chuan i pawimawh ber reng fo a, ka tih theih apiang tih ka tum thin. Harsatna harsa tak karah pawh i tan chuan nun ka inhuam a, i bulah chuan keimah hi ka intheihngihlh zawk thin tih i hriat kha. Ka hmangaih che tih hi i hriat tawh hnu mah ni se ka sawi nawn leh duh a, he khawvela ka awm loh hunah pawh chu chu thudik kumhlun tur a ni. Ka chanpual, ka nun hlimna hla ni reng ang che.



Seminar on Doctor of Pharmacy (Pharm.D)

Mangtha April

Zirsangkima

April thla a ni a, chumi thla ni 16 chu páwl 11 class tan ní a ni. Arts subject la tur ka ni a; kan class teacher turin hming a lam lai chuan hmeichhe pakhat, kei aia sáng hret tur, ngo fahran mai, hmeltha zet chu a rawn tlai a, luh a rawn díl a. A hawiherah chuan zàmna chhetê mah a nei lo tih a hriat. Khami tuma ka hmeichhe hmél hmuh kha vawiin thlenga ka hmuh nin ngai loh, ka nun neitu chu a ni ta reng mai!

Reilote hnuah 'Di-din' tiin an ko thin tih chu kan class-a mipaho chuan kan hre thuai a, kan school mipaho star rawn ber a ni thuai mai. Nitin chîk takin ka thlír ru reng thin a, biak erawh ka ngam reng reng lo. A hawiher leh a khawsakphung ka thlir ka thlirin mahni lu zo vah mai, mahni inringtâwk tak a ni tih chu hai rual a ni lo. A hmelthatna leh a pian nalhna te, a vun no leh nunzia te, a hmui chung lama a khuavàng chhinchhiah mawi zet mai te, a hmui leh a khabe phír rual thaih maite leh a nuih paha huat thla la dáwn khawpa a biang han khuar leh kaih thinte chu dahtha vek ta pawh ni ila, a mizia leh a khawsakphung ringawt pawh chu ngaihzáwn ngáwih ngawih tham a tling.



Ka thian nute nêan an inkawm azarah canteen-ah te chàwlhoin engtin tin emaw kan inbe ve ta zeuh zeuh a. A hnuah chuan inbe satliah mai kan ni ta lo, thian kan ni thuai mai. Ka thian mipate chuan min thîk thuai a, amah lo thian dang ka nei lo thuai bawk. October thlaa half-yearly exam kan zawh meuh chuan inkawmngaih tak kan ni tawh a. Zîng school kal leh tlai hàw-ah kan insáwm a, class kan neih loh tumte chuan midang kawp ka tum tawh lo. Kan pahnih tê chuan kan school thlanga botanical garden (school huan)-ah chuan kan léng dún thin.

Kan inkawm dân a thûk tial tial a. School lama kan inhmuh loh kâr hlekah sms-in text kan inthawn reng a, zan lamah kan inhnuaiia ka putêa broadband internet connection ka pawt chho a, Facebook-ah kan thlalâk chi tinréng kan inthawn a; ani chu ka 'diary' a ni ta thuai mai!

Ka phú loh Tleitiri, thiana ka siam tluka hlimna leh làwmna tur dang ka nei lo. Ka thiante thîk phâka ka awm te, amah avânga kum tam tak ka lo kawm tawh ka thian mipa thenkhatte thlauhthlaa amah ka kàwm ta ringawt pawh chu zaha lâk a hnêkin intihtheih nan tak ka hmang roh a. Mahse, Di-dini, 'April' tia keimah chauhin ka koh nêan chuan hei aia thûk zawk 'nun' hman chu ka la duh tlat a ni.

II

April thlaah kan intawng a, tûnah chuan December a lo ni leh ta reng mai. Inrinni zan khat chu zanlai pelh tawhah text min rawn thawn a. Kei chu nilénga ka nu dàwr nghahpui ka nih avangin ka chau deuh a, ka lo muhil tawh a. Mahse, ka lukham hnuaiia ka cell-phone khûr chuan min tiharh tho a.

Ka cell phone contact name-a April tia a hmang ka save chuan heti hian min rawn text a-

'Tunh cuan April par an tril tawh a, an hnahte pwh an tla kolh xo dn. Mhse, kn 2 inkar hi cu egtikahmh tril ve lo se k vn ti m! Gudnite May' tiin. (Ka' pian thla 'May' hi ani paw'n min koh nan a hmang ve a ni).

Ni e, kan intawn ni April thla chu a ral daih tawh, tûnah kum tàwp a ni tawh a, April pâr hnahte kha an tla kawlh zo ta. Keini chu kan inkawmngaih tial tial ... a ni satliah dawn em ni?

A text mi rawn thawn chuan ka ngaih a titha em em a, mut erawh min muthilhtir thei hauh lo thung. Chhàn lêt ka châk zek zek a, a ngaihna ka hre si lo. He hmeichhia hian ngaihzáwng atan min duh ... em ni?

A theih loh? Kan chhúngkaw chanchin engkim kan inhrilh tawn tawh kha. Ani chu mi hausa fanu, an fanu tê ber, an fanu neihchhun lehngal a ni; kei erawh hmeithai dàwrkai fapa, unau pianpui pawh nei lo ka ni. A pa chu sawrkar officer hausa, Aizâwl veng laili-a in chhâwng sarh a sâng sa thei a ni; kei chuan he khawvêla mi tam tak zingah 'pa' tia koh tur ka nei ve lo a, mi in luahin ka nu hmeithaipui mai a ni. Ani chuan a school kal lam leh hâw lam, a chhuahvahnaa a duh duha hman tur motor a nei, tin driver nen. Kei chuan chutiang engmah ka nei ve lo. Kei chuan a rûkin ka ngaizáwng reng a, anni chuan min ngaizáwng thei ngai lovang.

III

Hun a liam a, nipui thereng hrâm an reh a, thing hnah an tla kawlh zo a, Durtláng

leh Laipuitláng khàmah Bawngpupár an lo vul a, an páa chuai leh a. April-i nena kan inngaihna leh kan inkawmdân zawng zawng chu 'thian' tia sawifiah zawh rual a ni ta lo. Engkim inpe tawn tura Siamtu duan hran liau liau ni ber hian ka inhre ta hial! Hun a liam zêl ang a, kan nunphung leh kan khawsakphungte hi danglam zêl mah se, kei chuan danglam tawh ngai lo tur Hmangaihna ka chhar tawh a, chu chu ka nunpui a, ka thihpui thei hial ang ka ti!

April thla a rawn inher leh a. |o thli a thaw tan vûk vûk tawh a. Tlai khat chu school bàn dawn hnaihah thlipui leh ruahpui a rawn thawk tehreng mai a. Káwl a phe zuai zuai a, têk a de zawr zawr a, khawpui a ri dur dur bawk a. Hmeichheho chu hlauin an khûr a, dawhkànah an bawk thap hlawm a. Mipaho chu kan phusa nasa hle a. Ka tho a, April-i bulah chuan ka va thu phe a, ka kuah a, ani chu a kûn tlat a, a kut veilam chu lâksak ka'n tum a, lehkhathem hi a lo hûm thlan dup mai a, ka lâksak a. He thu hi a hmêl tluka mawi a kutziakin a lo ziaak reuh a-

'April páa chu May-ah an vul a. April thla chu thlipui leh ruahpui thawh nasat hun lai a ni a; ka mawina chu ka May páa hi i ni...' Ka chhiar zawh chuan min lo nuih var var a; keipawn ka nuih ve sak a.

Dárkar chanve vêl hnu chuan thli leh ruah chu a reh mai a. School pawh chu kan báng zui bawk a. |hianté chu an haw sap sap a, keini chu school tuaiah chuan kan la thu ràn a. Ani chuan school huana lènpuih min sáwm a.

Reiêk tláng chungah chuan ni chu a ding a, school huana thlai hnah leh pangpárte

chu a rawn chhun tle sur hlawm a; thli erawh a la thaw ri vûk vûk reng tho a. Kan samte chu a chhêm thur seng sung a, kan mitte pawh chu a chhém ro zo dawn mai. Kan ke pête pawh chu a timumal lo nuai bawk a. A pawnfête chu a chhém léng vawk vawk a; thlí-in a pawnfèn a'n chhém. chhoh ruala a mal var nó mawi tak lo lang leh zawk thinte chu a hmuhnawm tehreng nen a pawnfèn chu a'n hup leh taih taih thin a. Keini pahnih chu, chu thli thaw vûk vûk leh tlai ni nêl duai hnuaiah chuan kan kut kan inkai tlat a, hunah chuan kan lêng vêl a ni. Khawvêlin mihringte hnêna hlimna a pêk theih zawng zawng hi kan ta neih vek mai a ni.

School huan barel hnungah chuan kan thu a, kan ngawi reng a, kan inen leh thin a, kan nui leh ringawt thin. Khatih hunah khan thu kan va'n sawi hnem tak aw...!

Ka dâra bei April-i chuan min rawn en chho há a, kan inngaihzawn thu a nu hriat a hlauh thu a sawi mawlh mawlh a. Chutih lai chuan tlai ni tla tur pawh chu a nêl tial tial a, a no kher mai bawk a. Ka dârah a la bei ta reng a, a hriat phâk tâwk lekin "Ka hmangaih che, ka hmangaih che, ka hmangaih che..." ka ti mawlh mawlh mai a. Ni tlâk hma chuan ka hmangaihzia vawi tam tak ka hrilh hman a ni.

IV

Inrinni tum khat chu ka computer-ah project kan siam dùn a. Kan zawh dawn hnaihah ruah a rawn sùr chiam a. April-i chuan a nu leh pate hmun danga chaw an eitur thu a sawi rual chuan an ina léngah min sáwm nghal a. Taxi a phar a, an in panin kan inzui chhuak a.

An in chu páwn lama en ang ngawt a lo ni hauh lo mai. A chhúng chu pui miah miah tak a ni. A pa hi sawrkar hnathawk, officer, motor pawh dawng pha chin a ni tih ka hria a, a nu erawh chuan hna thawh a nei hran lêm lo; a ú mipa pahnihte chu phaiah lehkha zirin an awm tih zawng chu an chhúngkaw chanchin ka hriat chhun a ni. Heti êm êma an hausakna chhan hi ka hre lo; an vênga mi tuma'n an hre lo, an ti.

An inah chuan tumah an lo awm lo a, a room-ah kan lût tlang nghal a. A computer fel lo nia a sawi chu ka ensak a; ani chuan bathroom-ah insil turin min luhsan a.

A CPU hnung lam en ka tumna lamah a computer table hnungah chuan zu changkâng chi hlîr Chivas Regal, Black Dog, 100 Pipers tih vêl ûm ruak chu a lo inthiat far mai a; ka ûksak zui lêm lo. A monitor cable chu a lo nghet lo mai a lo ni a. A khâwl chu ka tinung nghal vut vut a. A desktop wallpaper-ah chuan Victoria Silvstedt-i thlalâk sexy fahran mai a lo tár kuau a. A desktop-ah vêk chuan notepad-a 'My ID' tia a file dah chu ka hawnsak a. Facebook-a a User name leh a password chi hrang hrang pathum chu ka zuk hmu a, ka pendrive-ah ka copy nghal thuai a. A hard drive ka'n ensak thuak thuak a, a E:t drive chhûngah chuan Downloaded files tih folder a lo awm a, ka luh hmain hidden files ka show tir phawt a. Chu folder chu ka'n hawng a, thumbnail-in ka view bawk a. E khai! Porn star ho an lo ding thuau mai!

3gp tih folder a siam hrang leh a, chumi chhûngah chuan folder hrang hrang-Mizo, Mizo thar, ftv, sap... tihte an lo lang suau mai. Ka hawn kual hmain ka hnung lam

bathroom kawngkhàr socket ball chu a ri rak a, ka hawi lêt a. Khawvêla hmeichhe duhawm leh hmeltha ber chu saruak titihin a lo chhuak mêk a ni!

Towel a rawn veng chhuak a, chung lamah chuan a brazier bâk thuam dang engmah a inbel lêm lo. Min rawn pan hnai a, min rawn fâwp nghal nawk nawk mai.. A towel ven lai chu a paih thla a, tihpalh thilthu-a a towel chu tla a ni hauh lo! Zei tak mai hian zaizirin a khum lam panpuiah min sáwm zui zat a. Ka harh zawk a-thil ni theiin ka hre lo.

Chhuata towel a paihthlâk chu ka chharsak a, ka ven thattir a. Tûn dinhmuna sex hmang thei kan la nih loh thu ka hrilh mawlh mawlh ringawt mai a ni. Kan inneih hmá zawng ka tana rinawma invawng thianghlim turin ka ngèn a, a ngawi kar mai.

Chumi zân chuan thil tam tak ka ngaihtuah a, khawvêla ka hmeichhe ìt ber, ka hmaa inphelh chu ka tlânsan a maw? Mâwl ka inti a ni. Mahse, ka hmangaihzia ka fiahna hun niin ka hre tlat a. Ka thiltihah tvisual êm êm-in ka inhre lêm lo.

V

Chumi zân chuan goodnight message takngial pawh min rawn, thawn lo. A tûk Pathianni tûkthuan eikhamah min rawn text chauh a, 'Inkhn dn m?' tiin. Ka chháng a, a reh zui leh daih!

A tûk Thawhtanni-ah school a rawn kal lo a. A kal loh tur thu a sawi lâwk si loa, mak ka ti hle. Chhùn chawlh vêleh PCO hnai ber ka pan a, phone ka tum a, a la thei si lo. Chumi ni chuan thildang engmah ka ngaihtuah thei lo. Tlai bàn veleh ka cell-phone atangin biak ka'n tum leh a, a la thei chuang lo.

Chumi zân dár 6.00 vêl chuan min rawn text ta-'K khuask hluah2 my. K nuam lo ltk. A nun mn mutpui, rn call sh' tiin.

A tûk pawh chuan school a la rawn kal peih chuang lo a, Nilaini-ah chawhma a rawn kal zawk a, a nawmsam loh chhuanlamin chawhnu chawlh a dîl a, min hàwsan leh a. Ka khua chu a har ngawih ngawih a ni.

Chutih hun lai chuan ka nu chu Kolkata lama in check-up tura kalpui a lo hun leh tawh a. Páwl 12 kan exam têt tawh si a; mahse, kalpui loh theih a ni si lova, exam loa ka nu kalpui tur chuan ka inbuatsaih a.

Kan zin hma ni chuan April-i chuan a car-in min rawn lam a, niléngin kan lêng dùn a. Ka zin hlàna a tana rinawma ka awm tlat tur thu ka hrih a; duhthawh taka ka infawh hnu chuan kan in mangtha zui a.

VI

Kolkata Salt Lake-a Mizoram House-ah kan inkulh a, khua chu lum naménin a lum lo! Ka nu chu Mizoram House kianga AMRI Hospital-ah kan admit a. A doctor chuan a lo bera kár thum awm a ngaih tur thu a sawi lâwk a; ka huphurh kher mai. April-i nen chuan phone-in kan inbe zeuh zeuh a, a chang chuan biak a har thei fú mai. Zan lamah ka nu chu riahpui an phal si lova, Internet café lamah ka tei lût leh nge nge thin a. A buai deuh vang nge ni Facebook lamah April-i sùlhnu hmuh tur a awm ngai meuh lo.

Kár thum kan chàm hnu pawh chuan ka nu chu a la rawn chhuak thei lo a. Zan khat chu Café lama ka luh hmain House hnung lama wine shop-ah chuan chilled beer ka

lam kaw i a. Café-ah ka thu ràn a; mahse, facebook lamah thil thar engmah ka la hmu chuang lo.

Thil pakhat ka ngaihtuah chhuak zawk a, April-i computer ka en ni a Orkut-a a ID ka hmuh kha a ni. Min biak nana a hman loh a ID dang hmang chuan Facebook-ah ka'n lût lâwr a-a ni thei lo! Ka nupui atana ka duhthusàm hian mi pâ, nupui fanau pawm lai nei a ngaizâwng ang maw? A theih loh! Mahse, à ni tlat si! April pár mawi tak ka thliah phal ngai loh chu mi pa'n min thliahsak ta!

Chu pa chuan nizân hmasa ngei pawh khan ka duat lai April-i chu a dân ngaite bawkin Swedish Vodka hmingthang Absolut Vodka hmangin a thlêm chhuak a, chu pa car chhûngah chuan an duh takte chu theihngilh thakin an tual lènna Aizawl chu 'Sin City'-ah an chantir a ni!

Ka mit sulh a, ka pik chun mai a, engmah ka ngaihtuah thui thei lo. House lam panin ka tlân chhuak a. Zanlai dár 12 a ri têt tawh a, House tualzáwlah chuan dormitory-a ka thlenpui mipa pathum hian an phone chu insi rialin an lo dah a. Bluetooth hmangin mizo sex tape thar an lo inthawn mêk a lo ni.

An sawi hmangin Aizâwla sikul naupang pakhat leh Kolkata vai supplier hausa sex tape an lo inthawn a. Ka'n bih ve chhin a-a mipa hmêl a lang loa, a hmeichhe hmêl pawh minute khat hnu velah a rawn lang chauh a, a ngo-in a no kher mai. Chu tleirâwl hmêltha zet chu ka'n en Chiang a-April-i!

Dormitory pana lift-a ka chuan lai chuan ka cell a rawn beeped a, hmeichhe tenawm

April-i sms ka dawng a. Delete nghal ka tum a; mahse, a tâwp nan tiin ka'n chhiar leh hrâm a-

"Nag mithianghlm gaizwng tr hn kei misual lh tenwm hi ka tlig xo ve ta lo!k at vagin mi tenwmah ka insiam ta. Facebook-ah egkm k rn post aw"

Rang mangkhêngin Café ka pan a, Facebook-ah chuan ka'n in sign-in tha leh a. April-i chuan saptawngin thu a rawn post a, mizotawngin han ziaak chhâwng dawn ila-

"Vawiin hi April ni 30 a ni tiraw? Mahse, he thu i hmuh meuh chuan May thla a ni tawh ngei ang. Kumin atan chuan April a ral ta, i thinlung chhungri la April pawh a ral mêk ang tih ka ring. April chu a thla nen, a mihring nen hmangaih tlak a ni ta lo!

Kei chu eirûk hmang fanu ka ni. Ka duh apiang ka pa'n min tihsak thei a; mahse, ka thiante inzuar hlâwkzia ka hriat ruala tihchhin ka châknate hi ka pa'n mi leisak thei ngai si lo.

Ka nu strict êm avanga kan Ina i rawn lén ka phal loh laite leh ka damloh chhuanlama school ka chawlh laite khan kei chu vai leh mizo sumdawng hausa leh officer thenkhatte'n min lei kual thin a. Ka thiltih hi thil سوال a ni tih ka hriat hnu hian ka tlai tawh si. Hnam dang nena kan mualphona chu tûn laia mite mit titlai bertu a ni mêk ta! Insiamthat nana hun duh rei turzia hi... Nang ang mipa dik tak pasala nei tur pheii chuan hun hian min dam zawhpui ka ring thei tawh lo.

Nang chu, mipa, mipa dik tak, thinlung zawng zawnga min hmangaihtu i ni a, ka zah che a, ka ngaisâng kumkhua tawh ang che. I hnên atanga ka dawn engkim avanga ka lawmthu sawina hi chu min lo pawmsak hrâm ang che aw. Kei chuan ka màwlna ka tuar mêk a nih hi!

May, mangtha phal lo che mah ila, muttui tal aw..."

Ka chhiar zo a. Ka hriat zawnga chu ka la dam a ni tih hi a ni. Ni e, ka nunna chu he khawvêla ka chan awm chhun a ni; ka mittui, mipa dik tak mittui nen hian!



S.L. Sailo Pharmacy Award to R. Lalremruati

PHARMACIST-TE PAWIMAWHNA

Lalvuana

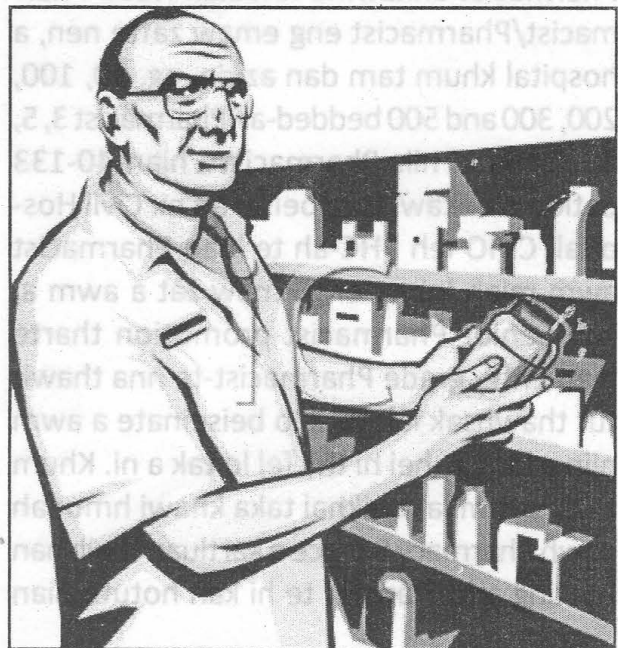
Contact No. 9862809961

Tirhkoh Paula'n, '...mahni insawimawi kan tan leh dawn em ni...'a tih ang deuhin tun tum chu Pharmacist-te leh a ruaitu Sawrkar leh mimal ten kan inenfiah nan ka vei zawng ka han phuhchhuak ve leh teh ang. Tun huat loh ni se, thahnemngaihna tih min lo hriatsak ka beisei.

Pharmacist-te pawimawhna hi kan ramah hian a tlahniam dawn dawnin a lang ta em, keini a Pharmacist-te ngei pawh hi hriat tlak loh hian kan lo awm ta zawk em ni, tih hi chhut tham a ni ta hialin ka hria. Heng a hnuaia Pharmacist pawimawhna hi ngun takin i lo bih Chiang teh ang u. A Pharmacist-te ngei pawh hian kan nih tur ni phak lo leh mi dangte rin tlak loh hian kan hnaah hian kan lo thawk lo zawkte pawh a ni thei tho mai, chuangin hengte hi ka han tarlang den den ang e.

i) Pharmacist chuan eng hna ber nge a thawh:

Section 42 of Pharmacy Act, 1948-ah chuan, Drugs leh a kaihhnawih chemical reagents reng reng Pharmacist ni lo tan chuan semchhuah, enkawl leh vawnthat te hi phal a ni lo a ni. He mi a nih avang hian damdawi dawr siana zuar tur pawhin Pharmacist Supervise-na lo chuan General License phei chu pek theih a ni lo a, Sawrkar hnuaia PHC, SHC, Dispensary leh Civil Hospital/Dist Hospital, Govt. hnuaia mi reng reng hi Drugs, Chemicals leh Dressing/Surgical appliances hmanna leh enkawl na a ni vek a, tunlaiin Damlo enkawlnan khawl tha tak



tak sawrkarin a lei a, heng zawng zawngte hi lo dawngsawng a, record fel taka vawng thaa lo receive tur te, installation leh maintenance a tul huna mawhphur tur chu Pharmacist-te hi an ni. A chhan chu Doctor chuan damlo a enkawl a, khawl hmangin damlo damna a ngaihtuah a, Nurse-ten Doctor-te puiin a tul ang zelin damlo enkawl hna an thawk bawk a. Bungrua leh khawl thil te documents vawn that hna an thawh hman loh avangin Pharmacist chu hospital leh PHC-a hetiang bungrua reng reng enkawl tura tih an ni. Hospital pakhat pawh Pharmacist hriatpui lohvin invoice/voucher receive leh record mumal loh avangin an khawl a lo chhia a, a siam turin a company koh tur an hre ta lo va, hluihlawn a ni ta ringawt mai a, a zia lo hle! Chuvangin, Pharmacist tel lova damdawi leh bungrua kalpui hi thil paw tak a ni thin.

ii) Strength of Hospital Pharmacy:

Hospital-ah reng reng chuan OPD, IPD Counter leh Store room a awm ngei tur a ni. Chu chu Chief Pharmacist/Superintending Pharmacist enkawl na hnuai ah Head Pharmacist/Pharmacist eng emaw zatte nen, a hospital khum tam dan azirin, eg. 50, 100, 200, 300 and 500 bedded-ah Pharmacist 3, 5, 8, 10 and 15 niin Pharmacist 1 hian 40-133 patients enkawl tura beisei an ni. Civil Hospital, CMO leh PHC-ah te hian Pharmacist awm miah lohna eng emaw zat a awm a, kan Senior Pharmacist promotion tharte hian entry grade Pharmacist-te hna thawh tur thawhsak leh tura lo beiseinate a awm niin a lang a, hei hi thil fel lo tak a ni. Khum awm zat mila rualkhai taka khawi hmunah pawh Pharmacy Service a kal tluan theih nan Posting and Transfer te hi kan hotute hian

min tihsak thin se a duhawm hle.

iii) Patient Counselling:

Pharmacist te hian Damdawi-ina damlote hman tur damdawi an enkawl a, chu chu Doctor-ten an prescribed a, Pharmacy atangin la chhuakin indent an pe chhuak a, chu chu Nurse-te leh Laboratory ahte pein damlo hnenah a tul dan angin hman thin a ni a. OPD-ah erawh chuan Physician-te prescription dungzuiin Pharmacist-ten damlo hnenah a hman dan tur dik tak te, a hman hun leh thil dangte nena hmanpawlh chi a nih leh nih loh te nen an lo hrilhin an lo dispense thin. Anti Microbial Resistance (AMR), natna hrik tihlum thei damdawi, a thawh tur anga thawhtir theih lohna (entirnan, Antibiotics ei dan dik lo leh ei zat tur ei loh avanga awm) leh Drugs Interaction (damdawi ei pawlh leh pawlh loh tur) hrilhfiah chung a damdawi pekchhuah te hi Pharmacist mawhphurhna a ni. Hei hi a tulna chhan chu Doctor-te hian an hrilh vek sen loh avangin Pharmacist-te mawh a ni. Hetianga kan mawhphurhna tihlawhtling tur hian kan tunlai thiamna mila kan inzir ve reng te pawh a pawimawh hle a ni.

iv) Storage Condition of Drugs:

Heng ang damdawi leh thil dangte hi Store room mumal takah Pharmacist chuan a storage condition tur danin a phût ang takin emaw, pha chiah lo mah se, a theih anga felfai takin a enkawl tur a ni. Chutianga Store enkawl dante zira Drugs, Chemicals & Reagent te a nihna tur dik tak a nih theih nan Store room tha tawk a ngai a, mahni remhriat ang anga uluk taka felfai leh damdawite a him theih nan sum

indaihlohna hmunah pawh tan la zel tur an ni. A tha ber chi (quality) thlang leh lei tura requirement siama ngaihtuah tur chuan Pharmacist-te hi an tha tawh veka ngaih a ni. Hospital-a hman chi equipments & appliances reng reng hi Pharmacist-te enkawl leh record vek tur a ni tih kan sawi tawh a, a chhan chu heng items chi hrang hrang quality leh reliable company te leh hospital a reagent leh thil dang te hi storage condition nei hrang vek an nih avang hian dah pawlh leh pawlh loh tur thlenga thliar fel thei tura a zira zir chu Pharmacist-te an ni.

v) Specific Storage Condition:

Pharmacist thenkhat chuan kan thil kawlte thliar hran ngai ti lem lova dah pawlh nulh mai te a awm theih a, kan damdawi leh thil dangte a lo thlen ang anga pe chhuak leh tawp mai te hi kan awm ve fo mai. A bik takin heng Radioisotope, Contrast media, X-ray equipments, films & developers leh Narcotic drugs te hi stock and maintenance hranpa ngai an nih avangin leh thil dangte nena hmun khata dahfin emaw chi a ni lo va, dahna hmun a hranpa a awm thei lo a nih pawhin, locker nei chi emaw Steel/Wooden Almirah-ah a hranga dahin a hmangtu hming leh Receive, Issue & Indent Record book nen a bika siamah enkawl ngaite-a nih avangin, Pharmacist ni lo staff dangte kuta dah chi a ni lo tih kan hriat a tha hle bawk.

vi) Specific Drugs:

Cancer damdawi te, Hepatitis B&C damdawi leh Antiviral drugs chi reng reng hi uluk taka competent staff-tena Stock and dispense tur a ni, a chhan chu adverse

drug reaction (ADR) tam tak nei a nih avang leh patient counselling ngai a ni a, dispensing hi qualified-te ngeiin an tih tur a ni. Thil dang heng Application and administration of drugs to patient hi chu Nursing personal tih tur a ni a, investigation leh examination chi hrang hrangte erawh chu Technician te hna a ni ve thung.

vii) Revenue:

Investigation Fees leh OPD card atanga revenue reng reng hi Pharmacist-te mawhphurhna a ni. Civil Hospital leh PHC-a OPD counter-ah te hian Phatrmacist-te chu in-charge an nih thin avangin heng fees hrang hrangte hi Pharmacist-te kutah a awm thin a, chu chu RKS fund emaw Govt. Revenue-ah emaw a tul dan ang zelin Account lamah thehluh thin a ni. OPD cards leh investigation result te chu old case leh new case-a thliar a ni leh a, chu chu further diagnosis atan te, Hospital Statistics atan OPD record-ah ziah luh thin a ni a, PHC-ah chuan monthly report atan te Pharmacist-ten CMO-ah te an thehluh thin a ni. (vide, job & responsibility of Pharmacist)

viii) Requirement siam:

A chung a kan tarlan tak Drugs, Surgical & Reagents te requirement siam leh indenting zawng zawng hi hospital Pharmacist te kuta awm a ni a, chu chu requirement siam nante a tangkai hle a ni. Hetah hian Lead Time hi hriat a tul khawp mai. Lead Time chu eng nge han sawifiah dawn ila- Lead time = Servicing time + Delivery time + Receiving time. Hemi awmzia chu order pek hun chhung + Supplier tena an rawn supply tura an inbuatsaih chhung + items supply lo enfiaha dawn hun thleng

hi a ni a, Lead Time hi a hun leh bungrua azirin a danglam thei bawk. Hei hi Pharmacist-te chuan kan hriat reng a tul a ni. Hei hi Pharmacist-te mawh phurhna a ni.

ix) Contract Pharmacist te Pay leh dinhmun:

Tun dinhmunah kan department bikah hian ngaih pawimawh lohna a awm ta deuh emaw chu tih turin NRHM ah te he lam atanga Contract Pharmacist te Pay estimate siamah pawh kan phu tawk aia hniama siam sakin, aia hniam zawkte dah san zawk an ni tlat a, Service Assn lam in hma an han lak pawhin awmzia vak a la awm thei rih lova, kan thawhna hmuna kan dinhmun leh Administration thlenga khawih thil anih avangin a mawhphurtu te hnenah pawh sawi a ni a, regular staff te thaw hang tho contract staff te hian an thawh ve avangin he mi siamtha tur hian kan hotu te chungah pawh beiseina kan nei sang hle.

x) District Medical Store:

Damdawi leh thil dangte hi Pharmacist ni lo chuan semchhuah, stock maintenance leh indent hi danin a phal loh avangin mi dang kuta dah hi dan kalh a ni. Chuvangin, kan department bikah heng FW, CMO, TB, Blindness, Leprosy, etc.-ah te hian Pharmacist-ten Store an enkawl ngei a tul a ni. A bik takin programme hrang hrang atanga PHC leh hospital ami tur CMS atanga thawnchhuah te hi District Hospital leh CMO office-ah te hian District Medical Store a awm loh avangin hospital leh CMO staff ten an lo pawt then a, a thlenna tur takah a thleng em tih hriat mang loh a awm thei a. DMS chu nei ila Pharmacy Officer

emaw, a lo berah Superintending Pharmacist ten thutchilhin staff (Pharmacist)-te nen lo dawngsawngin lo semdarh leh sela chuan tun aiin distribution system leh requirement siam pawh a mumal ngei ang. DMS siam tur hian a hranpaa building sak belh emaw a ngai chuang lo va, room han siamrem emaw siksawi deuhin a tih theih mai awm e.

xi) Community Pharmacist:

Mimala Pharmacy neite pawh hian kan pawimawhna hi kan hriat chian a tul. Kan damdawi quality leh company tha kan thlan thiam a tul a, mi dangte (eg. Doctor or company) nena inzawmna nei kan nih pawhin keimahni hlawkna ringawt um thei kan ni lo va, damlo leh mipui himna kan Pharmacy-ah a innghat tih hriat a tul hle. Pharmacist-te kan thutiam ah, 'Damdawi tha chauh damlo hnenah ka pe ang' tihte a awm kha. Wholesale nei kan nih pawhin kan damdawi pekna (retailer)-ten an duh ang apiang pek kher a tul lem lo tihte hriat a tha khawp mai. Pharmacist ngeiin kan run lo a nih pawhin, kan Pharmacist-te biakrawn fo a tul. Drugs abuse chungchangah leh dan lo anga tawlh rûk (drugs trafficking)-ah mawhphurhna chen kan nei a, Pharmacist-te heng thilah hian kan pawimawh ber ti ila kan ti sual awm lo ve.

Heng atang hian kan pawimawhna hriain department pawh hian kan nih tur ang tak hian min dah thei se, chutih rualin keimahni ngei pawhin kan pawimawhna hriain kan thawhna hmuna theuhah dikna leh taimakna nen thawk ila. Kan chungamiten kan kova mawhphurhna dang min pek belh a nih pawha, 'Ka tih tur a ni lo,' ti mai lovin, mi dangte tana thawk (public interest) kan nih hre thar leh theuh ila.

ANALYTICAL PARAMETERS USED IN ASSAY VALIDATION AS PER ICH GUIDELINES

Rosangluaia Betlu

The process of analytical method validation should demonstrate that the method is fit for its intended purpose. The validation process should follow a plan that includes the scope of the method, the method performance characteristics and acceptance limits. Parameters usually examined in the validation process are limits of detection and quantification, accuracy, precision, selectivity/specificity, linearity, range and ruggedness. A validation report should be generated with all experimental conditions and the complete statistics. If standard methods are used, it should be verified that the scope of the method and validation data, for example, sample matrix, linearity, range and detection limits comply with the laboratory's analyses requirements, otherwise the validation of the standard method should be repeated using the laboratory's own.

It is important for one to understand the parameters or characteristics involved in the validation process. The various performance parameters, which are addressed in a validation exercise, are grouped as follows.

1. Accuracy

The accuracy of an analytical method may be defined as the closeness of the test results obtained by the method to the true value. It is the measure of the exactness of the analytical method developed. Accuracy may often express as percent recovery by the assay of a known amount of analyte added. Accuracy may be determined by applying the method to samples or mixtures of excipients to which known amount of analyte have been added both above and below the normal levels expected in the samples. Accuracy is then calculated from the test results as the percentage of the analyte recovered by the assay. Dosage form assays commonly provide accuracy within 3-5% of the true value. The ICH documents recommend that accuracy should be assessed using a minimum of nine determinations over a minimum of three concentration levels, covering the specified range (i.e. three concentrations and three replicated of each concentration).

2. Precision

The precision of an analytical method is the degree of agreement among individual test results when the method is applied repeatedly to multiple samplings of homogenous samples. This is usually expressed as the standard deviation or the relative standard deviation (coefficient of variation). Precision is a measure of the degree of reproducibility or of the repeatability of the analytical method under normal operating circumstances. Repeatability involves analysis of replicates by the analyst using the same equipment and method and conducting the precision study over short period of time while reproducibility involves precision study, Different Occasions, Different Laboratories Different Batch of Reagent, Different Analysts, Different Equipments.

Determination of Repeatability

Repeatability can be defined as the precision of the procedure when repeated by same analyst under the same operating conditions (same reagents, equipments, settings and laboratory) over a short interval of time. It is normally expected that at least six replicates be carried out and a table showing each individual result provided from which the mean, standard deviation and co-efficient of variation should be calculated for set of n value. The RSD values are important for showing degree of variation expected when the analytical procedure is repeated several time in a standard situation. (RSD below 1% for built drugs, RSD below 2% for assays in finished product.)

The ICH documents recommend that repeatability should be assessed using a

minimum of nine determinations covering the specified range for the procedure (i.e. three concentrations and three replicates of each concentration or using a minimum of six determinations at 100% of the test concentration).

Determination of reproducibility

Reproducibility means the precision of the procedure when it is carried out under different conditions - usually in different laboratories - on separate, putatively identical samples taken from the same homogenous batch of material. Comparisons of results obtained by different analysts, by the use of different equipments, or by carrying out the analysis at different times can also provide valuable information.

3. Linearity and range

The linearity of an analytical method is its ability to elicit test results that are directly (or by a well defined mathematical transformation) proportional to the analyte concentration in samples within a given range. Linearity usually expressed in terms of the variance around the slope of regression line Calculated according to an established mathematical relationship from test results obtained by the analysis of samples with varying concentrations of analytes. The linear range of delectability that obeys Beer's law is dependent on the compound analyzed and the detector used. The working sample concentration and samples tested for accuracy should be in the linear range. The claim that the method is linear is to be justified with additional mention of zero intercept by processing data by linear least square regression. Data is processed by linear least square

regression declaring the regression co-efficient and b of the linear equation $y = ax + b$ together with the correlation coefficient of determination r . For the method to be linear the r value should be close to 1. The range of an analytical method is the interval between the upper and lower levels of the analyte (including these levels) that have been demonstrated to be determined with precision, accuracy and linearity using the method as written.

4. Limit of Detection and limit of Quantification

Limit of detection

The limit of detection is the parameter of limit tests. It is the lowest level of analytes that can be detected, but not necessarily determined in a quantitative fashion, using a specific method under the required experimental conditions. The limit test thus merely substantiates that the analytes concentration is above or below a certain level. The determination of the limit of detection of instrumental procedures is carried out by determining the signal-to-noise ratio by comparing test results from the samples with known concentration of analytes with those of blank samples and establishing the minimum level at which the analyte can be reliably detected. A signal-to-noise ratio of 2:1 or 3:1 is generally accepted. The signal-to-noise ratio is determined by dividing the base peak by the standard deviation of all data points below a set threshold. Limit of detection is calculated by taking the concentration of the peak of interest divided by three times the signal-to-noise ratio. For spectroscopic techniques

or other methods that rely upon a calibration curve for quantitative measurements, the IUPAC approach employs the standard deviation of the intercept (S_a) which may be related to LOD and the slope of the calibration curve, b , by $LOD = 3 S_a / b$

Limit of quantification

Limit of quantification is a parameter of quantitative assays for low levels of compounds in sample matrices such as impurities in bulk drugs and degradation products in finished pharmaceuticals. The limit of quantification is the lowest concentration of analyte in a sample that may be determined with acceptable accuracy and precision when the required procedure is applied. It is measured by analyzing samples containing known quantities of the analyte and determining the lowest level at which acceptable degrees of accuracy and precision are attainable. Where the final assessment is based on an instrumental reading, the magnitude of background response is found by analyzing a number of blank samples and calculating the standard deviation of this response. The standard deviation multiplied by a factor (usually 10) provides an estimate of the limit of quantification. In many cases, the limit of quantification is approximately twice the limit of detection.

$$\text{Limit of Quantification} = 10 S_a / S$$

Where, S = Slope of calibration

S_a = S.D of y -intercept of regression coefficient

5. Selectivity and Specificity

The selectivity of an analytical method is its ability to measure accurately

and specifically the analyte of interest in the presence of components that may be expected to be present in the sample matrix. Selectivity may be expressed in terms of the bias of the assay results obtained when the procedure is applied to the analytes in the presence of expected levels of other components, compared the results obtained when the procedure is applied to the analytes in the presence of expected levels of other components, compared to the results obtained on the same analytes without added substances. When the other components are all known and available, selectivity may be determined by comparing the test results obtained on the analytes with and without the addition of the potentially interfering materials. When such components are either unidentified or unavailable, a measure of selectivity can often be obtained by determining the recovery of a standard addition of pure analytes to a material containing a constant level of the other components.

6. Robustness

The robustness of an analytical method is a measure of its capacity to remain unaffected by small but deliberate variation in method parameters and provides an indication of its reliability during normal usage. The determination of robustness requires that methods characteristic are assessed when one or more operating parameter varied

7. Ruggedness

The ruggedness of an analytical method is the degree of reproducibility of test results obtained by the analysis of the

same samples under a variety of normal test conditions such as different laboratories, different analysts, using operational and environmental conditions that may differ but are still within the specified parameters of the assay. The testing of ruggedness is normally suggested when the method is to be used in more than one laboratory. Ruggedness is normally expressed as the lack of the influence on the test results of operational and environmental variables of the analytical method. For the determination of ruggedness, the degree of reproducibility of test result is determined as function of the assay variable. This reproducibility may be compared to the precision of the assay under normal condition to obtain a measure of the ruggedness of the analytical method.

8. Stability and System suitability tests

Stability of the sample, standard and reagents is required for a reasonable time to generate reproducible and reliable results. For example, 24 hour stability is desired for solutions and reagents that need to be prepared for each analysis. System suitability test provide the added assurance that on a specific occasion the method is giving, accurate and precise results. System suitability test are run every time a method is used either before or during analysis. The results of each system suitability test are compared with defined acceptance criteria and if they pass, the method is deemed satisfactory on that occasion. The nature of the test and the acceptance criteria will be based upon data generated during method development optimization and validation experiments.

Nang i ni si a!

Jenny

Nun hi ka ngaihtuah chian chang chuan a ropui ka ti a, a chhunga tel ve te hi a inthlahrunawm riau hian ka hre thin. Mihring dik tak ni tura a kawng thuzia te leh paltlang tur a tam turzia te hi phak lo takin ka ngaihtuah ve thin a. Thenkhat tan chuan vawiin hi ni pangngai mai a ni a, kum ral zel hian an rilru a khawih buai lo a, hriatna lamah than an tum hek lo. Nuna thil ropuite hi ka sawi leh ka sel ve phak loh hi a tam zawk a ni a, mahse Nang chu ka ta i ni!

Mite angin tawngkam mawi leh thlum ka thiam lo a, ka tawngkam bah takte hi thuam mawi ka tum ngai hek lo. Mite angin ka kut hian thu mawi leh tha tak tak a ziak thiam lo a, amaherawhchu ka chunggril thu puak chhuak ka ziak ve mai thin. Hetianga thu nawi tak tak ka chham tak duah hi min lo dem lo la, ka nihna a ni a, nang hi ka nihna, ka nih chhan i nih vang zawkin ka nihna hi i nihna a ni a, chu nihna chu hmachhuan ka duh a ni.

Hmanah chuan mawi taka nungin Siamtu'n a siam leilung mawi hi ka chèn a, mite angin thil ropui ti thei lo mah ila ka chungah Siamtu a lungawi ve em em thin. Mahse hlimni leh lawmni a chám reng thei lo a, chungkua kan kim reng thei lo angin tha hi a tha reng thei lo. Thim thuk takah ka pil a, mi mawl mai ka nih avangin chhuahna kawng inhawng reng pawh chu ka hmu lo thin. Ka thilung a rüm a, ka thlarau a chau a! Tuma'n ka rüm ri an hre lo a, hmangaihna chu hmuhsitnaah a chang thin.

Thla a lo sik hian vawt hian na takin min tham thin a, hriatrengna na tak pai chüngin huphurh takin ka hmang ral ve thin. He khawvela hun ka hman ve tawh zawng zawng hi nep tak a ni a, malna, khawharna leh natna ten hun tawp



an khar fo. Thiante zingah ka mal tlat fo a, leilung mawi tak hian a rukin min vel fo asin. Kan hmangaih leh min hmangaihtute he khawvela hmuh leh tawh loh tur an nihna dinhmun raphlakzia ka tem tawh a, dam chhunga lungngaihna a tling a, hriatrengna baihvai tak chuan min chenchilh reng thin.

Mahse Nang i lo lang a! Kha thlasik kha huphurh taka ka hmachhawn lai khan nang hian min tuam lum dawn a ni tih ka lo hre reng reng lo. Mak takin kan intawng a, hmanhmawh takin in kan sa a, kan vela mite demna tinreng ngai pawimawh duh loin nghet taka invuanin kan in sakah chuan kan insawn lut a nih kha. Ka hmangaih tirh ni che atang khan keimahah intiamna a awm a, 'damchung' tih hi kan hmaah a inchhawp ngahlin ka hmu asin.

Hmangaihna hi a awm a nih ngai chuan i mi hmangaihna hi ka duh ber a, a bak a awm thei tawh chuang lo tih ka hria. Hmangaihna tawp chin nei leh huatnaa chang leh thin hi ka tawng fo tawh a, Nang i lo lan atang khan a hmel hmuh pawh ka duh tawh lo. Nang chuan hmangaihna awm zawng zawngin min hmangaih a, tah chuan ka chawl a, thlamuang takin ka muhil thei tawh asin! Hmangaih dan min zirtir a, ka lo zawn thin kha nangmahah hian ka hmu vek a ni. Ka lawmna hi sawi sen a ni lo a, sawi dawn pawh ni ila kei ve mai hian ka sawifiah thiam chuang lo ang.

Ka nuna ruak lai leh hliam laite chu i hnawh khatin i tuam dam a, duat takin min enkawl a, min chawi mu thin. Ka pa thlanah keimahin ka kal fo a, ka mangannate chu ka thlen a, mahse min chhangtu a awm ngai

lo. Ka vela buainate chu hmuh hmaih pakhat mah i nei lo a, beiseina awm dawn lo mah se thlanah chuan min kalpui fo a, ngawi rengin ka na chu min tawrhpu thin. Tichuan i awm nghengin ka chawl a, zawhna tam takte chu nangmahah a chhanna ka hmu thin asin.

Ka buainate chu i buainaah i chantir a, ka beih zawh loh harsatnate chu min sut kiansak a. Nang ang renga ka chhungte'n an rin leh an hnaih hi an la awm ngai lo a, kan tana malsawmna ni tur hian Nang hi thlan i ni a, i hlu bik em em a ni. Thil tam zawkte chu sawi sen an ni dawn chuang lo a, mahse hei hi chu sawi hram ka duh: vawiina ka dinhmun min petu, thim atanga eng a min dahtu, beidawng tawh hnu beiseina min petu i ni a, ka tan hian i hlu ber!

Thiam lo tak chungin i laka ka rilru put puakchhuakte chu hlain ka ziakchhuak fo a, i tan chauh hian hmangaihna thu hi ka lo la ziak a ni tih hi i hria tiraw? Ka thiamnate hi an beitham em a, ka insit thin. Mi thiamte angin thu mawi tak tak ziak chhuak thiam ila, ka thiamna zawng zawng chu tawk lo ka la ti fo ang. I tan hian thil tha ber zel ka duh a, ka theihnate hi an tlem em a, a chang chuan Siamtu hi ka dem hial thin asin. Mahse ka engkim hi i tan ka hlan a, a bak ka mamawh lo, min hmangaihtu dik tak i ni si a.

Kan khawvelah chuan huatna leh selnain hmun an chang lo a, Nang leh kei leh kan inhmangaihna hi a tawk kan ti em em a ni tiraw? Hei aia hlu hi ka nun hian a la tawng lo a, a tawng leh tawh lo baw ang. Thlasik khaw vawtin min dang zo lo a, nipui khaw lumin min em chau thei hek lo. Nang nena ka thil tawnte hi ka nunah chuan a sang

ber vek an ni a, a ang ka hmu leh dawn tawh lo tih ka hria a, a bo mai ka hlau thin a ni.

Mahse Nang nen chuan in mawi tak kan sa, a a chhungah kan hlim a, kan danglam dawn lo a, eng buaina mahin min tibuai zo tak tak dawn lo tih kan hria. Ka hmangaih che ka tih hian keimaha hmangaihna awm zawng zawngin ka hmangaih che tih hi hre reng la, he ka hmangaihna che pawh hi tawh lo ka ti fo thin a ni tih pawh hria la ka duh. Thiam lo taka ka hmangaihna ka lanchhuahtirte lungawi taka i lo pawm thin avang hian lawmthu hrilh che hi ka ba nasa a ni. Ka thiam lo thin - thil tam tak hi, mahse ka zak lo, Nang i ni si a!

Ka thilungah hian thil tam tak a awm a, mahse ka sawifiah thiam tawh tak tak dawn chuang lo. A tawp berah chuan Thlanthlá, 'thih thlengin' ka tih thin hi a tawh ka ti lo a, chatuan hi wawi tam tak inher nawn dawn pawh ni se Nang leh kei hi ka duh ber fo ang tih hi hre rawh aw. Kan inhmangaihna hi a thianghlim a, a mawi bik a, a tlo bik a ni. Keini ang hi an awm lo a, an awm leh thein ka ring lo bawk. Thawnthu ngaihnaawm tak, tahna leh lawmna tingaihnaawmtu kan ni a, kan tawpna pawh hmangaihna a ni ang. Kan inah chuan i tan ka awm reng dawn a, liam thei zawng zawng an liam hunah pawh thlamuang takin ka lo nghak thin ang che.



Refresher Course 2011

Zawngtenawhlung hi Diabetes damdawiah a hman tlak tak zet em?

Dr. H Lalhlenmawia

Head of Department
Pharmacy, RIPANS

Athupui i chhiar hian 'Zawng' tih lai khi ZÁWNG (ramsa) hming kan lam angin lam suh ang che. 'Mi zawng zawng' tih thu kan sawi a, 'zawng' hmasa zawk lam dan ang hian lam tur a ni. A hming an vuah nachhan hi kei pawhin ka la hre mai thei bik lo... A botanical name chu *Mallotus roxburghianus* a ni a, Cucurbitaceae family a ni. Engpawh ni se, mi tam takin a tui chhum ka in hian ka blood sugar a tihnam an tih avangte leh zunthlum lam kaihnawiha hmanna sawi a tam em avangin kum 2005 atang khan zunthlum natna atana a that dan zirchianna research lian lutuk lo kan tan a, kan thil hmuhchhuah tlem azawng ka ziaik ve a ni.

Ka research atana min kaihruaitu hi Dr. S.C. Mandal-a, Jadavpur University-a Pharmaceutical Technology Department-a Professor ni lai a ni a, ani hi zunthlum damdawi thlai atanga hmuhchhuah tumin kum rei tak chhung research lo kalpui tawh a ni a, helam kawngah hian khawvel hmun hrang hrangah zirtirna pein a lo kalkual tawh thin a ni. A thlai chanchin ka sawi atangin a phur hle mai a, hnathawh dan tur a duang chhuak thuai a, hetiangin:

Step 1-na: Zawngtenawhlung thlai hi khawvel ram dangah zirchianna report a awm tawh em tih chian tur.

Step 2-na: A hnah lak a, silfai vek a, hmun thengthaw, ni hlimah tihro tur.

Step 3-na: A hnah ro chu tihdip darh tur a ni a, chhihri mesh 60-in hrik vek tur (Mesh hi seive kaw len zawng sawina a ni).

Step 4na: Methanol-in darkar 72 chhung Soxhlet-ah chhum a, a tui chu Rotary Vacuum evaporator-ah chhuan khang a, Freeze dryer-in tihro vek tur (hei hi crude extract kan ti tawh ang).

Step 5-na: A chemical neih lak chhuahnaa kawng hmasa ber atan chemical group awm angte test tur.

Step 6-na: Crude extract kha a dose Sazu (Rat)-ah zawn chhuah a, mihring taksa tichhe thei awm a awm em tih Sazu-ah zir tur.

Step 7-na: Sazu-ah zunthlum veitir a, chu chu thlai (crude extract)-in a tidam thei em tih zir chian tur.

Step 8-na: Thlai (crude extract) atangin chemical lak chhuah a, a structure siam tur.

Step 9-na: Chemical lak chhuahte a mal malin zunthlum vei sazu enkawl nan hman leh tur. An tihdam theih leh theih loh prove tur.

Heng ka'n tarlante khi research thawhkhatna atan zawh phawt tur a ni a, a result azirin chhonzawm leh tur a ni ang.

Hna kan tañ ta

Step 1-na atanga step 5-na thleng hi chu awlsam takin kan zo ve mai a, Zawngtenawhlung-ah chuan damdawi lam chia hman theih tur chemical group chi khat ALKALOIDS a awm tih kan hmu chhuak ta a, kan lawm tan viau mai. Alkaloids hi chu chemical compound tam tak sawina a ni ve mai a, damdawi atana hman tam tak a awm a, tur (poison) tha tak tak a tam hle bawk. Alkaloids a awm avanga damdawi tha awm anga han sawi tur chu a ni lo a, mahse damdawi tha atan hman theih chi chemical a awm ve ngei a ni tih kan finfiah chauh a la ni.

A dose tur kan zawng tan

Kan research tih vel dan tur chu University-a Institutional Animal Ethics Com-

mittee ten an pawm fel hnuin Sazu chi khat Albina strain Sprague-Dawley an tih bik chu kan research tihna Jadavpur University atang chuan a bik taka helam atana lo vulhtute hnen atang chuan kan order ve ta a. Uluk takin Carboxy Methyl Cellulose-ah kan tisawm a, dose hrang hrangah siam in sazute kan pe ta a ni. Sazu paruk hi group pakhatatah kan dah zel a, chutianga chuan dose tam dan indawtin 2000mg/kg dose thleng sazute chu kan pe ta a. Kan pek atanga darkar tinin a awm dan kan en zel a, an thisen te kan la a, cholesterol-te leh thil dang chi hrang hrang kan en deuh reng bawk a. A tawpah chuan sazute chu ni sarhi hnuah kan zai ta a, an taksa hrang hrangah thil dik lo a awm em tih kan en leh vek a, a tawpah chuan he thlai hian sazu taksaah thil tha lo a thlen lem lo tih kan hmu chhuak a, a dose atan 400 mg/kg pekin a tha lo zawngin hnathawh a nei lo tih kan finfiah ta bawk a ni.

Zunthlum enkawl nan a hman theih dawn em?

A chung a kan sawi tak ang chi sazu chu a pa (male) hlang 72 kan la hrang ta a, chung te chu damdawi chi khat Streptozocin injection kan pe ta a ni. Darkar 48 chhungin sazu blood sugar hi a sang hman thei hle mai a, an vaiin 300 dL/mg an ni hman vek a ni. Streptozocin hi a hnathawh a mak khawp a, sazu kawchunga a pancrease ami, Islet of langerhans-a beta cell an tih kha a zuk tichhia a, chu chuan thisena insulin insiam thin kha a siam thei ta lo a, an thisenah glucose kha a lo sang ta vak mai thin a ni.

Chutianga sazu thisena glucose lo sang ta vak mai chu kan thlai kha damdawi-

ah siamin chumi hmang chuan kan enkawl ta a ni. He kan reserach tihna atan bik hian model pakhat ni 21 chhung kan thlang a, ni 21 chhungin sazu chu kan enkawl ta a ni. He sazu kan enkawl chhung hian an thisena glucose level kha ni khat danah kan en ziah a, ni 21 ni-ah chuan sazute chu kan zai ta a. An thin (liver) te, kal (kidney) te, thluak (brain) te, an tihrawl (muscle) te, thisen (blood) te kan la a, chung te chu zaidarh in enzyme awm chi hrang hrang te, glycogen awm dante leh thil dang biochemical an neih ang angte sazu mal tin ami kha a mal theuhin kan en chhuak ta vek a ni. Chungte chu chaw leh tui chiah pek sazute nen kan khaikhin leh ta vek a ni.

Chutiang anga thil chi hrang hrang kan kan en vek hnu chuan hei hi kan hmu chhuak ta a ni - Zawngtenawhlung thlai chuan sazu zunthlum veite chu enge maw chen chu a ti dam thei tih kan hmuchhuak ta a ni.

Mahse...

Mahse... ti tlat teh ang, sazu-a he thlai hnathawh theih dan hi tunlaia damdawi hmante zinga pakhat, Glibenclamide nen kan khaikhin ta a. He damdawi hnathawh theih zaa sawmnhih (20%) vel chauh a thawk thei tih kan hmuchhuak leh ta a, rin ai chuan a hnathawh theih chu a sang lo hle mai. Rilruah chuan crude extract chauh a ni alawm te ka ti a. Chemical chi hrang hrang he thlai atanga kan lak hran theih chuan a hnathawh a chak deuh mai thei a ni.

Chemical thliar hran kan tum ta a...

Hun a duhin a har ka ti hle mai, ka beidawng viau thin nghe nghe a ni. Thin

layer Chromatography (TLC) hmangin theihtawpin thliar hran kan tum a, TLC plate 497 ka siam atangin Column Chromatography hmanga chemical chi hrang hrang la chhuak turin a tih dan kan zawng chhuak a ni. TLC plate hi 497 hi a tha chauh a ni a, a tha lo leh ka hlawhchhamna te nena chhiar chuan 1000 chuang fe ka siamin ka hria.

Column chromatography kan tan ta a, rin aiin hun a duh hle mai. Thla thum chhung chu ni khat mah chawl miah loin hna ka thawk tluan parh reng a ni. Zing dar 7:00-a hna kan tan hi zan dar 9:00-ah kan bang ziah thin a ni. Thil dang ngaihtuahna hman a awm lo hle thin. Bei a dawng duh ngei mai. Hlawhtling dawn loa inhriatna vawi tam tak ka nei thin a, mahse kan rin Pathian hian ka tawngtaina a chhang thin a, a tawp ka thleng thei ta a ni. Vawi khat chu ka guide nen hian kan bei a dawng hle mai a, ani pawh a ngaihtuahna a buai hle maiin ka hria a, research kal lai tihtawp maite kan tum hial a ni. Mahse, Pathianin finna a rawn pe leh thin a, bul kan tan tha leh thin. A tawpah chuan alkaloid thianghlim tak mai chu kan la hrang thei ta a ni. He alkaloid hi thlai hnaha 100 zela 0.1 vel chauh a ni a, a tlem hle a ni.

Alkaloids kan lâk hran chu...

Sazu-a zunthlum vei enkawl nan a tha em tih kan en leh ta a, a hmaa kan lo tih tawh angin sazu chu zunthlum kan veitir leh ta a, tah chuan chu alkaloid chuan kan enkawl leh ta a ni. A mak khawp mai - alkaloid thianghlim tak chuan a hmaa zunthlum a tihdam theih dan ai khan a hniam leh zawk mah a ni. He thil awmzia ni thei ta ber chu - alkaloid kan lâk hran hi zunthlum

enkawlina atan a lo tha fal bik lo hle niin a ngaih theih a ni.

Nuclear magnetic resonance (NMR), Mass Spectrometer, Infrared Specrometer tein en vek a ni a, chuta result atang chuan chemical formula leh structure te siam chhuah a ni ta bawk a ni.

Zunthlum tan chuan a tha reng dawn em ni?

He zawnha dik taka chhang thei tur hi chuan kan research tih hi chhunzawm ngei a ngai dawn a, mahse, tuna kan thlen chinah hi chuan thlai hian a chemical neih zawng zawng chawhpawlh hian thisena glucose chu a tihniam ngei mai a, mahse , damdawi hman laite nena khaikhin ralah chuan a tha lo hle mai. Thisena glucose chu a tihniam thei ngei mai, mahse mihringin ei dawn ta ila, thisena glucose tihniam thei leh thatpui tham tur chuan ei hnem a ngai lutuk dawn a, taksain a thatpui a rinawm lem loh a ni. Alkaloids ni lo, chemical dang awmte kha tun dinhmunah chuan kan la hrang thei rih lo a, mahse a lan danah chuan chemical tha lak hran mai tur a awm mang loin a hriat tho bawk.

Tlangkawmna

Mi thenkhatin Zawngtenawhlung hnah chhum tui hi zunthlum inenkawlina atan an hmang thjin a, a that thute an sawi thin bawk. Amaherawhchu he kan research hmuhchhuah chin atang hi chuan a lan dan maiah chuan zunthlum enkawlina atan

chuan hman bera neih atan a tlak loh emaw chu a tih theih a, mahse ka tarlan tawh angin, kan research tih chin hi a la tlem hle a, hnial theih pawh a la ni viau mai. Mahse ka mimal ngaihnanah zunthlum enkawlina atan chuan hman loh law law a him rih zawkin ka hria.

Mi tam takin eng thlai emaw a tha tiin kan ei bawrh bawrh mai a, chutih laiin damdawi dang doctor-ten min chawh kan ei tel tho bawk a, engtin nge khangte kha kan taksa chungah an inchawhpawlh dan a hriat theih mai tawh si lo a, dampuina aiin that loh zualna te pawh thlen thei thil tam tak kan ei thin tih hriain thlai damdawi kan eiin fimkhur thin ang u.

He research ka tih laia min kaihruaitu Dr. S.C. Mandal hi pa fing leh thiam, thil hre zau tak mai leh experience ngah tak mai a ni a, a thiamna hi a turu ka ti thin khawp mai. Vawiin thlengin thil tamtak kan ti dun a, research-te kan la khawih dun reng bawk. Thlai atangin damdawi tam tak a hmuchhuak tawh bawk a ni.

Ka reserach tihpui tho pakhat chu Kumarrapan-a a ni a, hang ngaihnopei tak mai, rilru tha tak mai a ni a, a thiam em em bawk. Tunah hian Malaysia-ah Professor hna a cheih mek a, 2011-a Malaysia-a lecture pe-a ka kal tumin kan inhmu a, a hnathawhna hmunte ka tlawh bawk a, a lo ropui tawh khawp mai. A hnen atanga ka thil zir hi ka theihngihl tawh ngai lo ang.



Bowl of Hygeia

The "Bowl of Hygeia" symbol is the most widely recognized international symbol of pharmacy. In Greek mythology, Hygeia was the daughter and assistant of Aesculapius (sometimes spelled Asklepios), the God of Medicine and Healing. Hygeia's classical symbol was a bowl containing a medicinal potion with the serpent of Wisdom (or guardianship) partaking it. This is the same serpent of Wisdom, which appears on the caduceus, the staff of Aesculapius, which is the symbol of medicine.

The pharmacy profession has used numerous symbols over the past centuries. These symbols include, but are not limited to, the mortar and pestle, the Rx sign, various alchemical symbols, the show mander, "A" for apothecary Hygeia. The Bowl of Hygeia is national symbol for the profession. Sources indicate that the symbol of St. John dating based on the legend that a tro to the apostle. There is also was used as a symbol for the they used this emblem during anniversary of the founding of the University of Padua. However, no proof has been found to substantiate either of these claims. We do know that the Bowl of Hygeia was associated with pharmacy as early as 1796, when the symbol was used on a coin minted for the Parisian Society of Pharmacy.



globe, the green cross, the sala- (Apotheke), and the Bowl of the most widely recognized inter- sion of pharmacy today. Several bol may have been used as an back to first century a.d. This is phy containing poison was offered speculation that the Bowl of Hygeia apothecaries of Italy in 1222, since the celebration of the 700th anni-

The Bowl of Hygeia originated from Greek mythology and is universally depicted as a snake wrapped in one manner or another around a bowl. Aesculapius (pronounced Es-Kah-Lay-Pi-Ous and sometimes spelled Asklepios) was the Greek god of medicine and healing. He was the son of Apollo, who was the son of Zeus. Zeus became afraid that Aesculapius would render all men immortal because of his healing power, so he killed him with a thunderbolt. Temples were built for Aesculapius, and harmless serpents were found inside. These serpents appeared dead because they were stiff. However, when picked up and dropped, they slithered away. The people at that time thought the serpents were brought back to life by the healing powers of Aesculapius, which ultimately caused them to become the symbol of healing. Hygeia, the daughter of Aesculapius and the goddess of health, is usually depicted with a serpent around her arm and a bowl in her hand because she tended to the temples containing these snakes.

We have since separated the serpent and the bowl from Hygeia herself, and this has become the internationally recognized symbol of pharmacy. Now the bowl represents a medicinal potion, and the snake represents healing. Healing through medicine is precisely why pharmacy has adopted the Bowl of Hygeia symbol. The American Pharmaceutical Association adopted the Bowl of Hygeia as its symbol to represent the pharmacy profession in 1964.



Dr. C. Biakmawia

Director

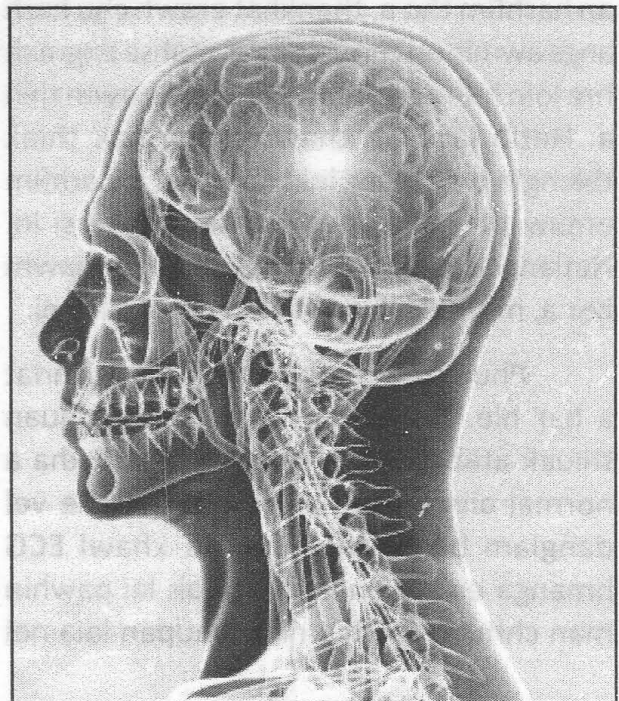
Bethesda Hospital & Research Centre

EPILEPSY (Phungzawl Natna)

Phûng a awm nge awm lo tih chu thu dang ni se, phungzawl han tih tak hi chu hrisel lohna chi khat a ni mai a.

Damdawi lam tawng chuan Epilepsy an ti a, Zo tawngin Phungzawl tih a ni a. A dik tak chuan **Luhai chhuah chang nei** te ti ila, a dik mah zawk awm e. He natna hi eng hunah pawh a vei theih a, naupang leh puiltengah a lan chhuah dan a tlangpuiin a inang a. Chutiang natna nei chu thawk leh khatah luhai, kaih, chalchangin an awm a, leiah tluin, chilphuante tlain, zun leh ek cheh hiah ten an lo awm a. Rei vak lo hnuah an khawng leh kaih a lo reh a, muttui tak angin an mut zawm thin. Damlote hi nikhaw hre chin an nih chuan, he thil lo thleng tur hi an hre lawk thei thin. Anmahniah hriatna danglam deuhin a han thawng hmasa thin a, chu chu ri emaw, thawm emaw, rim danglam emaw, thil tui lo, leiin a hriat chite emaw, thli thawt loh laia thli thaw nia hriatna, an bul vela hrisel pangngaiten an hriat ve lohina han tham lawk thin.

Phungzawl natna hi a hlauhawrina ber chu luhai leh tluk chang neih hrim hrim ai mahin, hetia nikhaw hre loa an tluk hian an taksa an sawh chhia ang tih a hlauhawm ber a ni. Chuvangin tham lawkna an hriat vele lei rem, hmun remah insaseng vat thin se a him ber a ni. Hemi a nih avang hian thingkung lawn te, lirthei khalh te, khawl hmuna hna thawh te, tui hleuh te, mei bula khawsak te, tlak leh insawh nat theihna ang chi hmuna hna thawh leh ei zawn hi a him lo



a. Hmun him emaw, hna him emaw ngaihtuhsak an tul a ni.

Phungzawl luhai a lo chhuah hian nikhaw hre lo ta chu an lei te an seh palh tur ven a tha a, chuvangin an ka chhungah fian te emaw, fian liang emaw, thil kapna thun theih a tha a. An leiin an thawkna dawt a hnawh lohna tura an lu sir khata kaih thlek leh an lei pawh chhuah a tha. An thawmhnaw inbel lai ten a hren chep leh an thisenzam kal vel a tihlem lohna turin an kawrkilh phelh dul tem pheikhawk phelhsak te, necktie an awrh chuan phelhsak te a tha a. Kawngghren leh thawmhnaw tawt lutuk a nih chuan phelh dulsak a tha a ni.

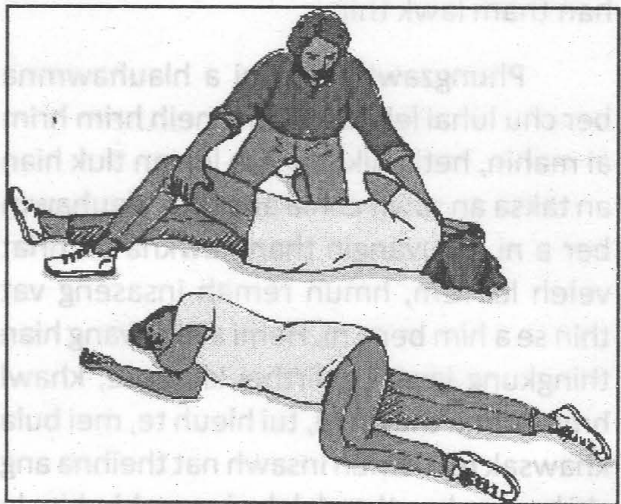
An kaih lai leh a hnu rei vak lo chhung hian nikhua an hre lo a, chuvangin enkawlungun an ngai zual a ni. Hemi hnu hian muttui tak angin an mut zawm a, darkar chanve emaw, darkar khat chhung emaw a ni ber. Hemi hnua hian a tam ber chu an lo harh chhuak a, thil thleng engmah hre lo mah se an harhfim tho a, thenkhat erawh chu harh anga awmin an che vel thei a, mahse engmah hre loin hun eng emaw chhung an awm thin a. Hetih lai hian thawmhnaw hak thlak thlengin hre chiang loin an ti thei a, harhfim emaw tih mai turin, mahse an hre si lo. Hetiang ho hi an vak bo ang tih a hlauhawm ber a, mitmei leh enthlak reng an tul a ni.

Phungzawl natna hi a chhan tak hriat a har hle. He natna hi miin a vei chuan thluak atanga electric inpe chhuak kha a normal aiin a nasa a, he electric che vel danglam bik hi thluak enna khawl ECG hmanga en chuan kaih lan loh lai pawhin man chhuah theih a ni a. Naupan laia nei

lo, len hnua nei chauh te an nih chuan insawh, a bik takin lu leh thluak sawh khawloh vangin a awm thei a. Tin, rulhut chi khat, thluaka pem chho a, han thi khawng thei na awm a, chumi vei vanga phungzawl kan tih tak natna pawchhuak a awm theih bawk. Eng pawh ni se, he natna hi a tam ber chu a chhan leh vang hriat loh a ni a, kan hriat thiam zawngin pianpui that lohna ti mai ila a ni awm e.

Enkawlna damdawi tha tak hmuh chhuah a ni tawh a, he damdawi hi taima taka hun rei tawk ei a tul a ni. Naupan laia he natna nei chu an damdawi mamawh tawk dik tak thlah miah loa kum hnih chhung an ei theih chuan a dam hlen theia ngaih a ni. He damdawi hi a tawk aia tlema ei chuan kaih a veng chuang lo a, a tangkai lo a, tam lutuka ei chuan damlo a tinguai leh a, nunphung pangngai an ban pha lo bawk si a; chuvangin doctor thiamte hnena enkawlna leh ei tur zat zawh phawt a tul a. A tul angin leh taksa leh leh tet athuin an lo chhutpui thei ang che.

Mizoin awihawm ve tak thil, mahse dik miah si lo, he natna enkawlna chungchanga sawi ve thin kan nei a, chu



chu khawizu a ngeih tih hi a ni. Phungzawl nikhaw hre lo hi khawizu fiante khat pawh a lem hman chuan a dam ngei ngei an ti thin a. Hmun thenkhatah chuan khawizu tlemte zawngin an tlan chuk thin. Hei hi thudik zawk chu a ni - nikhaw hre lo chuan thil a lem thei lo a, thil a lem theih phawt chuan a harh chhuak tan tihna a ni a, khawizu a nih vang ni loin, thil lem theia a lo awm leh chuan a harh chhuak dawn tihna a ni mai. Tuisik pawh a lem theih chuan a harh tho tho ang. Kan chhinchhiah tur erawh chu, nikhaw hre lo hi thil in tur leh ei tur

pek loh tur a ni zawk. Lem thei si lo kha kan tulh luih chuan thawkna dawtah te lutin a hak thei a, aspiration pneumonia nasa takin a vei thei a ni. A thu hrimah a hma lawk pawha tha pangngai, rei lote nikhua a hriat loh chhung khan khawizu emaw, tuisik tlem emaw a taksain a mamawh thar thut lo ang tih hria ila. Lem hnih khat a lem loh avangin a thihpui chuang lo tur ang bawkin, a han lem avanga dampui ta tur a ni lo tih hi chiang ila. Damdawi ni lo kan damdawi sawi vak mai thinte hi kan intiluhai tlang a ni.

(He article ziaktu Dr. C. Biakmawia hian MBBS, Christian Medical College, Vellore-a a zawh hnuah 1972 khan Durtlangah a thawk tan a. Zirna sang zawk zirin tum 2 Sap ramah a feh chhuak a, Post Graduate qualification pali lai a zir zo a, international level-ah chawimawina 10 chuang dawng tawhin a zirna college, Vellore chuan kum 2009 khan an hunpui ber, College Day - address pe turin an sawm a, an chawimawina sang ber 'Paul Harison Award 2009' an hlan bawk a ni. Durtlang Hospital-ah Director hmasa ber niin a pension a, tunah hian Bethesda Hospital-ah Director a ni mek a ni.)



National Pharmacy Week 2011

THENAWMPA DAMDAWI KA NGAIHTUAHNA TIBUAITU A NI FO THIN

Dr. Vanlalruata

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Medical Superintendent, Synod Hospital

Durtlang, Mizoram

Dam hi a hlu a, taksa natna nei lova awm chu vanneihthlak tak a ni. Natna tuar lo tura hma kan lak dan erawh a dik lo, tak saa natna a lan chhuah hnuah chauh tan kan la ta thin. Tihdarn aiin inven a tha zawk tin hi miuangte tana pawimawhna nei chauh niin Kan ngai lui deun em ni, ei insum ngai leh taksa tana tha lo, tih loh tur ngei pawh rilruin hrereng mahse taksain a tuar theih lam ngaihtuah duh lovin kan eiin kan in a, zuk leh hmuam, ruihtheih thil thlengin kan hnualsuat thei lo. Mikhualte an puar lovang tih kan hlauhna tawngkam hi asin ropui rem rem! Savun peng a keh tak tak theilo tih te a ni riap mai, hriselna lam nen chuan inpersan tak a ni. Kan mizo rilru leh induhsakna chu thil lawmawm tak a ni, a tha e. Mahse ngaihtuah chian erawh a ngai, natna lo awm hnu chauhva tihdam turn chu hma kan lak dan a ni deuh ber. Damna kawng kan zawnnah chuan THENAWMPA DAMDAWI thlengin kan bawh leh ruak ruak si thin, lekhathiam leh mi fing khawsak dan zawng a ni lo tawp mai. Dam kan duh vanga kan rilru put hmang hria mi thenkhat tana remchang taka sumdawna kawng lo inhawng ta te hi a hlawk khawp awm asin!. Engpawhnise chu lam chu ka sawi turn ber a ni lem lo.

Khawvel hnam tinte hian taksa damna atan pi leh pu atanga tih dan leh hman thin kan nei vek, keini mizote pawh hian ei/in chi, hnawih chi leh tihdan hrang hrang kan nei, A THA tih kan nei tarn hie. Pa tawngkam thiam deuhvin a that zia an sawi avanga thenawmpa damdawi chu damdawi tha ber



lo ni ta mai a awm chawk, chung chu dam nan hman kan turn tlat tawh thin. Hnim hnah, thing zung, lung thi atanga Sava chi khat Chhuangtuar thlengin a tha tih kan nei tarn hie. Hei hi a ni ngaihtuah ngun ngaia ka hriat thin chu !. Damdawi siam sa lei theih'tura zawrh chhuah zawng zawngte hi mi thiamten uluk taka a hnathawh dan leh pawia khawih theih dan engkim an enchin hnua mihringte tana him leh A THA a ni tih an finfiah hnua pawh, hman tur zat, hman hun tur leh engtia rei nge hman tur, hman tarn lutuk avanga pawia thei thlengin an zira an enfiah (experiment)-fe hnua zawrh chhuah theiha phalna pek chauh an ni thin. Chuti chung pawh chuan a thiamte kaihhruaina hnuaiah lo chuan duh duha ei/in phal a la ni lo leh ta nghal. Doctor chauh lo chuan ei leh in turin tumah an rawn thiango a ni. Thenawmpa damdawi "a tha" nia kan sawi leh kan hman thin dan hi ngaihtuah chian a tul hie. Tha tling tura a kawng hi a in anglo lu lai em mai, "chu mi kha mi chuan a ei/in a, a tha a ni awm e, chumi chuan a hmanga a dampui an ti" tih vel hi a patency hmuh dan chu a ni mai a, dil buai ngai lova grant-tu pawh thenawmpa a ni deuh mai.

Ka thil tawn ngei han sawi kai ta lawk ila - Tonsil na avang hian naupan lai atangin ka buai fo thin a, puitlin hnu thleng pawhin min tih buai chang a awm leh thin a. Ni leh thia leh a kum ka sawi thei ta chiah lova, Tonsil na, hnai insiam avangin ka khua a sik a, hnaah pawh duty thei lovin ka awm a. Doctor-in Penicillin Injection min chawh angin nurse ten in lamah darkar bi neiin min vil zak zak renga. Ni thum hnu velah chuan ka zia awm chho viau tawh a, ka

khawsik erawh a la reh fel chiah lo. Chutia chhun lamah pawh ka la mut reng lai chuan thenawm pa pahnih an lo kal a, kei chuan ka lo la chiau au peih vak rih lohva. Ka damloh thu leh ka nat dan te hriaa min rawn tlawh pahin duhsak takin THENAWMPA DAMDAWI ngei mai chu min rawn ken hi a lo ni a. Chu chu Maufim hlo a ni a, a siam dan te kan nu hnenah hrihlin an tawng chu ka ngaithla reng thung a. A that zia mi sawi an hriatte an sawi nasa mai a, kei chu in tir ve chhin ngei ngei turin kan nu chu an hrih a. An haw tak hnua kan nu chuan ka tih chhin duh leh duh loh min zawt a, eng danga chhang lovin injection ka lak mek bakah ka changkang chho zel bawka dah tha rih mai turin ka hrih a. Hmang ta lem lovin ka dam chho ve ta zel a, maufim hlo pawh chu eng ang nge a ni tih hre turin hmuh pawh ka hmu ve ta reng reng lo a ni.

A hnu kum thum /kum li hnu velah phone-in pa pakhat ka hriat ngai pawh ni lovin min rawn bia a, a thu rawn sawi leh min zawhna chu he article rawn pianna chhan ta ber chu a lo ni ta. Mau fim hlo hmanga Tonsil na zawng zawng dampui ta vek nia mi sawi a hriat vanga ka tawngkam ngei, a dik leh dik loh hre tura min rawn bia hi a lo ni a. Thenawmpa ten duhsak taka, a harsa a harsaa, min rawn laksak kha ka hman tak loh thu pawh sawi ngam lovin ka ngawihbo pui ta mai kha a ni si a. Ka dam phah ta nia sawi tu chu tu dang ni lovin thenawmpate an ni ngei mai! an ni lo chu midang hria pawh an awm si lo!. Thatpui turin ka ei tak loh thu chu min rawn zawttu hnena ka sawi a ngai ta!, thenawmpa dawt sawia puh a ngai dawn ta a va ni mai awm ve tiin inthiamlo tak chungin ni khua a rei

ta deuhva ka hre reng vak ta lo hie mai, mahse ka ei ta chiah lovin ka inhria tiin, Penicillin injection-te la in ka dam ta nia ka hriat zawk thu te, maufim hlo chu ka dam chhan ber nia ka hriat lem loh ziate chu ka thiam ang tawkin ka hrilh ta a ni. Hmang ca miau lo chuan ka thatpui ka ti thei tlat lo a ni. Ka that pui ni awmin lo sawi ta ila minrawn phone-tu khan a ei ve mai dawn emaw, midang kiangah a that zia ha hipin a lo sawi leh ngei dawn emaw a ni ang. A sawi hretu chuan tha berah a sawi ve leh tawh thung ngei dawn, a chiang reng mai. Chutiang chu a ni THENAWMPA DAMDAWI ka tih chu.

Natna avanga kan thih chhan tarn tak hi keini mizote bikah kan ei leh inte nen hian ngaihtuah zawm theih a tarn viau awme. Kan tih dik loh leh ngaihtuah ngun lem lova kan hman mai mai te hian pawia khawih thei mai ang em? Chawhmeh tui bera kan neih te hi hriselna atan thil tha an ni nge taksa khawih pawia thei zawk ?. Thangthar mi thiamte hian heng hi zir chian a tul mang e. Zu avanga nun tawi, thih hun lova thi ta sawi tur an tarn, zu hnathawh avanga an taksa lo chhiat chhoh dan kan hre chiang. An thih chhan chu ZU a ni. Cancer pawh hi mizote min suattu a ni tih kan hria, a chhan ber erawh kan la hre rih lo. Engvangin nge cancer vei kan tarn ? A chhan chu zuk leh hmuam a ni thei, thlai leh sa rep/um ei tarn vang a ni thei, ni thei a tarn mai. Heng kan ei/in ten taksa cancer a thlen dan tak erawh hi chu zu in mihring taksa a khawih chhiat dan kan hriat tluk

chuan kan la sawi chiang thei lo. Nimahsela hei hi erawh kan chiang - Pathianin mihringte tana ei leh in tur khawvela thil chi hrang hrang min pek te hi taksa tana tha tur tawk ei leh hman thiam a ngai, tih hi.

Ka sawi lan duh ber zawk chu damdawi chi hrang hrangte hi leilung leh a chhunga thil awmte minerals, ransa, thlai leh mihring taksa leh thil dang dang atanga siam chhuah an ni vek. Nimahsela chung siamchhuah nana thil hmante chuan mihring tana tha lo leh taksa huat zawng an pai tel vek thung. Chung thil tha lo te chu paih chhuakin damdawi atana hman tur thil chauh chu la chhuak(extract)-in damdawi chu siam chhuah a ni ta chauh thin. Thenawmpa damdawi chungchanga ngaihtuah ngun tula ka hriat lai ber chu hei ni a ni - Damna atana kan hman thin hnim leh thlai, ransate thleng hian damdawi chu an ni thei teh meuh mai. Amaherawhchu an taksa leh an thil pai zinga mihring huat zawng leh ngeih loh thil (poison)awm te paih chhuak lova kan ei tel thin a nih chuan damna atana kan hman hian taksaah nghawng tha lo a siam ngei ang. Vawilehkhatah thihna emaw taksaah thatlohna emaw a thlen nghalin a lang chhuak lem lo a ni thei. A rei hnua nghawng thalo nei tur, lang chhuak tur a ni mai ang em?, tih fo chi a ni em? "An ti" tih leh "A ni awme" tih atanga A THA an tih hi a him ang em, nghawng thalo a nei thei zawk ang em tih hian rilru a luah a, THENAWMPA DAMDAWI hian KA NGAIHTUAHNA A TIBUAI FO lothei lo a ni.



DISASTER MANAGEMENT KAMKEUNA

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1. DISASTER

Disaster chu mipui, vantlang, khawtlang leh chhungkaw khawsak phung pangngai nasa taka ti khaihlak tu leh ti bahlahtu, buaina leh tawrhna namen lo tak mai lo thlenna a ni a. Thil hlauhawm, chhياتna rawn thlen thei tu lo thawk thutin nunphung pangngai leh intunnunna ti khaihlak avanga mihring nunna leh in leh lo te chan vak loh na tura hmalak ngaihtir thin tu hi a ni tiin a sawi theih bawk a. A tawi zawngin Mizo te chuan Chhiatrupna emaw rikrum thil tiin kan sawi mai thin. Heng chhياتna leh buai harsatna lo thlen tirtu (Hazards) te chu Khuarel chhياتna (Natural Hazard/Disaster) leh Mihringte thlen chawp chhياتna (Man-Made Hazard/Disaster) hrang hrang te avang a ni thei.

2. PARADIGM SHIFT IN DISASTER MANAGEMENT

Kum 2002 hmalam kha chuan Disaster Management han tih hian Sorkar leh mipui rilru in a hawi ber chu Tuilian leh Khawkheng te niin ; Tuilian leh Khawkheng te chu lo inpuahchah leh inven hleihtheih nia an lan loh bawk avang leh heng hian kumtin thlathar chhuah a nghawng nasat thin em avangin Ministry of Agriculture in kengkawhin hmalakna chu chhياتna a lo thlen hnu a in tanpui (Relief) bak tih a nih vak ngai lova. Mahse hetih mek lai hian chhياتna chi hrang hrang te leh Lirngching na fe fe India ram hmun thenkhatah a lo thleng ta zauh zauh mai a. Tichuan India sorkar chuan Disaster Management lam kalphung chu felhlel deuh a hriain High Power Committee on Disaster Management chu kum 1999 August thlaah a din ta a, an din hnu rei lo teah 1999 October thlaah Orissa Super Cyclone a lo thawk vak a, namen lo a tawrhna a thlen hnu lawk, Kum 2001, 26th January ah Bhuj, Gujarat lirngching na tak a lo thlen khan India ram Sorkar pawh a thangharh ta tak tak a. Kalphung thar duang chhuakin Chhياتna a lo thlen hnu a in tanpui (Relief)

ringawt tawh lovin inhmakhualawk na lam hawi tawh zawkin Prevention (Chhiatna rapthlak lo thleng tur emaw, a pawikhawih tur pumpelh theihna), Mitigation (chhiatna lo thleng thin, tawrhna tihnepna tura hma lakna), Preparedness (lo inbuatsaih lawkna) zawnga hmalak hian Tawrhna leh chhiatna a titem thei ang tiin intanpui leh chhawmdawl hlamchhiah chuang si lovin hma lak a ni ta zawk a ni.

3. DISASTER CHI HRANG HRANG TE

High Power Committee on Disaster Management chuan India ram hmun hrang hranga chengte tana chhiatna chi hrang hrang lo thleng thinte zirchiangin hetiang hian an then a :-

I. Water and Climate Related Disasters

1. Flood and Drainage management (Tuilian leh an luanna lam)
2. Cyclone (Thlipui)
3. Tornado/Hurricane (Thlipui)
4. Hailstorm (Ruah Van Rial)
5. Cloud Burst (Ruah bawhawk)
6. Thunder & Lightning (Khawpui leh Tek)
7. Avalanches (Vur tawlh)
8. Heat wave and Cold wave (Thlilum leh thli vawt)
9. Sea Erosion (Tuipui fawn sang hrut chhiat)
10. Drought (Khawkheng)

II. Geologically Related Disaster

1. Earthquake (Lirnging)
2. Landslides and mud flow (Leimin leh lei tawlh)
3. Dam burst/failure (Tuikhuah sah thut)
4. Mine Fires (Thil hlu laihchhuahnaa kangmei chhuak)
5. Volcanic eruption (Tlangkang)

III. Chemical, Industrial & Nuclear Related Disasters

1. Chemical and Industrial Disaster (Damdawi leh thilsiamna hmuna chhiatna)
2. Nuclear Disaster (Nuclear avanga chhiatna).

IV. Accident Related Disasters

1. Urban Fire (Khawpui kang)
2. Village Fire (Khaw kang)
3. Forest Fire (Ram kang)
4. Electric Disaster & Fire (Electric kaihhawih chhiatna leh kangmei etc.)
5. Serial Bomb Blast (Bomb puak)
6. Oil spill (Nasa taka Oil i.e. Petrol, Diesel, Khawnvartui, etc. bua)
7. Festival Related Disaster (Kutpui hmanna a intihpalhna)

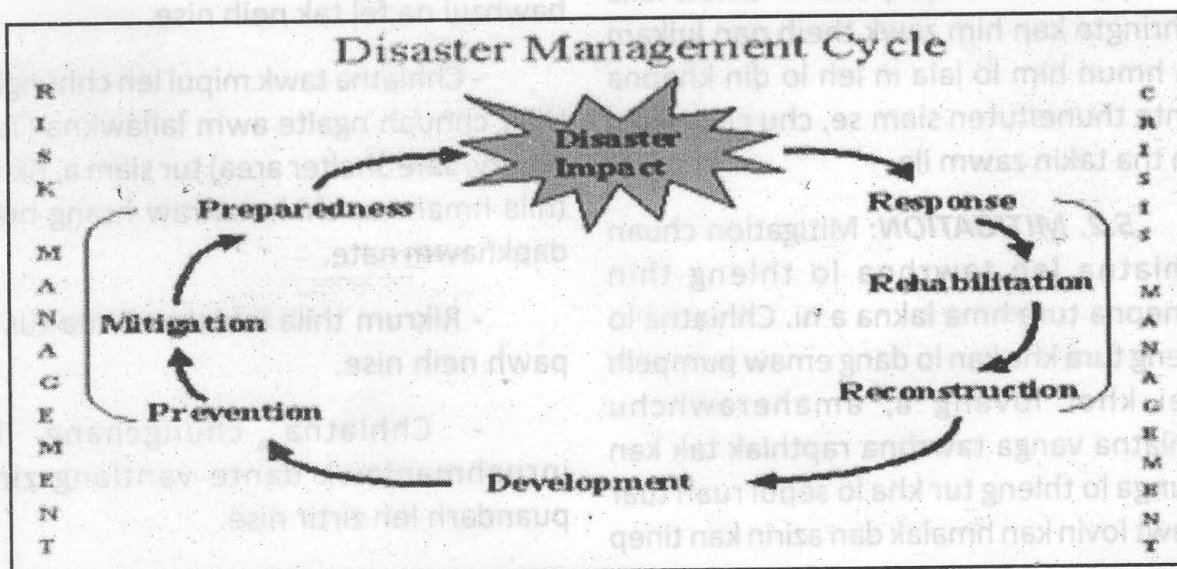
8. Air, Road & Rail Accidents
(Boruak leh Khawmual zin kawnga chetsualna)
9. Boat capsizing
(Lawng chetsualna)
10. Mine Flooding
(Thil hlu laihchhuahna Tui in a chim)
11. Major Building Collapse
(In chim)

V. Biological Related Disaster

1. Biological Disasters & Epidemics
(Hri hlauhawm thehdarh leh hrileng)
2. Pest Attacks
(Rannung in thlai a ei chhialna)
3. Cattle Epidemics
(Ran hrileng)
4. Food poisoning
(Ei tur thianghlim lo, thihna thlen thei).

4. DISASTER MANAGEMENT

Disaster ten pawl nasa tak a thlen tur tihnep leh tihtlem a nih theihnan a kawng hrang hrang a hma lo lak lawkna a ni a. Chhialna lo thleng tur laka lo invente, lo inbuatsaih leh inrinlawkna leh dinhmun hlauhawma awm mek, chhialnain a khawih ngei tura rinten an pumpelh theih nana hmalakna te, chhialna lo hmachhawn thei tura inpuahchah lawkna, chhialna a lo thlen hnua chhanchhuah hna leh chhialnain a khawih chhial te dam khaw chhuahna, tanpuina leh chhawmdawl hna zawng zawngte, ngaiawh leh tura beihna te hi a ni. Chhialna thlen hma, a thlen lai leh a thlen hnua hmalak dan zawng



zawng bakah a tul anga ngaihven zuina thlengin a huam tel vek a ni.

5. DISASTER MANAGEMENT CYCLE

Disaster Management Cycle chu chhياتna rapthlak chungchanga hmalakna tur rahbi pawimawh chi hrang hrang (Prevention, Mitigation, Preparedness, Disaster Impact, Response, Recovery & Development) te a indawt dan tura awmze nei taka tarlanna hi a ni a. Hengte hi inlaichinna nei, inkungkaih tawn, inkhaidiat dan mumal tak nei a ni.

5.1. PREVENTION: Chhياتna rapthlak lo thleng tur emaw, a pawikhawih tur pumpelh theihna tur zawnga hmalakna a ni.

(i) Thal laia kangmei laka himna turin meikawng sah te, bawlhhlawh leh hnawmhawk lo thenfaite hi a tangkai hle. Hetianga hmalakna hian kangmei chhuak tur a veng dawn a ni. Ramhnuai hmun thenkhatah kangmei lo chhuak pawh nise, meikawng tha taka sial emaw a kan zau zel loh nana lo hal khalhin ramkang zel tur a veng thei a ni.

(ii) Tuilian emaw, Leimin emaw laka mihringte kan him zawk theih nan luikam leh hmun him lo laia in leh lo din khapna dante thuneituten siam se, chu chu mipui ten tha takin zawm ila.

5.2. MITIGATION: Mitigation chuan chhياتna leh tawrhna lo thleng thin tihnepna tura hma lakna a ni. Chhياتna lo thleng tura kha kan lo dang emaw pumpelh thei kher lovang a, amaherawhchu chhياتna vanga tawrhna rapthlak tak kan chung a lo thleng tur kha lo sepuí ruah tuar ngawt lovin kan hmalak dan azirin kan tinep

thei a ni. In leh lo sak/din dan khauh zawka kalpui, Ram leilung hman dan duan chhuah, In sak danah him zawk leh tha zawk a sak dan tur kaihhruaina siam, Khawmual, tuipui leh boruaka a him zawk a zin dan ruahman, Eng (electric supply), tui leh inbiakpawhna hmunpui leh hmun pawimawh dang dangte chhe mai lo tura uluk taka siam, Kawngpui ber chhيات palh pawha kalna dang awm thei tura kawng tenau zawk siam emaw chhياتna thlen duhna lai hmun hel zawnga kawngpui thar ruahmanna leh a dang dangte hi Mitigationah a tel vek a ni.

5.3. PREPAREDNESS: Hei hian chhياتna chungchanga lo inbuatsaih lawkna zawng zawng a huam thei vek a. Sawrkar chetna tur te, tlawmngai pawl hrang hrang te tel ve theihna tur te, vantlang leh mimal tinte tan pawha chhياتna lo thlen huna rang taka mahni chanpual theuha chet zung zung theihna tur chia ruahmanna siam lawk thiam a tul a ni. Entirna thenkhat tarlang ila:

- Level hrang hrang Disaster Management Plan ruahman na, a enkawlina leh bawhzui na fel tak neih nise.

- Chhياتna tawk mipui leh chhungkua thiar chhuah ngaite awm lailawkna (Temporary/Safe Shelter area) tur siam a, rikrum thila hman tur chi hmanraw hrang hrang dapkhawm nate.

- Rikrum thila inbiakpawhna tur chi pawh neih nise.

- Chhياتna chungchang leh inruahmanlawk dante vantlang zinga puandarh leh zirtir nise.

Vano - Chhiatna lo thlen huna hmalak dan tur ataka zir (mock drill) te, chhiatna thlen duhna lai hmuna leh huna inchhan dan emaw, kangmei thelh dan emaw, intanpui dan hrang hrangte a hmun ngeia zir leh mipuite hmuh theih a lantir thin nise.

Inbuatsaih lawkna (preparedness) hi a la then darh leh theih a :

Warning : Chhiatna lo thleng mai thei hriat a nih avang a inralring tur a thu than lawk na, inhriattir zung zung na te, tanpui ngai an awm anih pawh a puitu tur koh zung zung na a ni.

Threat : Thil hlauhawm lo thleng mai thei tur laka inbuatsaih lawk tura inhriattirna a ni a. A chung a mi nen khian a kalphung a inang hle. Amaherawhchu, threat chuan mipuite hnena hriattirna pe satliah mai ni lovin hriattir an nih anga an zawm loh chuan an chungah chhiatna rapthlak tak a thleng ngei dawn a ni ti a, a ruh langa in hriattirna hi a kawk bik a ni.

Precaution : Invenlawkna tihna a ni mai a. Chhiatna eng ber emaw lo thleng tur thu thanlawk lo dawn veleh mipuite hnenah a zau thei ang berin hmalak lawk theih dan tur kawng hrang hrang inhriattir na a ni. Entirnan :- School/Office te khar nghal turin leh Rikrum thulha hman tur hmanruate nen lo inralrin.

5.4. DISASTER IMPACT: Chhiatna lo thlenna hmun leh chumi chhiatna-in a nghawngte tihna a ni ; chhiatna thlen hun lai a a thawh dan pawh a huam tel thei bawk. Disaster Management kalhmangah chuan chhiatna rawn inmun dan azirin an thawh dan pawh a danglam thin a ni.

Entirnan :- Lirngching chu inthamlawk awm lovin a lo thleng thut thin a, a chet chung pawh a rei lo thin, a khawih chhiat erawh chu rapthlak tak a ni thei thung. Thlipui erawh chu a intham lawk chhung a rei a, a thawh chhung pawh a rei thin, a pawikhawih leh a tihchhiat theih hun chhung pawh a rei tihna a ni, achang chuan thawk leh khata rawn thawh nawn thut changte a nei bawk thin.

5.5. RESPONSE: Chhiatna a lo thlena chawpchilha hmalak nghalna a ni ber. Chutiang hmalaknate chu nun chhanhim nana hmalakna te, bungraw hloh tur ven nana hmalakna te, chhiatna avanga tawrhna nasa tak lo awm tur leh a khawih chhiat zel theih tur venna tura hmalakna te a ni ber a. Hmalakna tur thenkhat chu duan lawk ang taka chet chhuah nghal (Implementation of plans) te, chak taka hma la thei tura mamawh tur engkim nena lo inpeih lawk (Activation of the counter-disaster system) te, tanpui ngai te, chhan ngaite dapa chhanchhuah (Search and Rescue), rang taka ei tur sem te, tawmhimna tur puan in/ buk siamte, damdawi nena hliamte enkawl nghal, (Provision of the emergency food, shelter, medical assistance), chhiatna avanga tawrh dan, In leh lo chhe zat, nunna hloh zat, bungraw hloh zatte fel taka chhut chhuah (Damage Assessment).

5.6. RECOVERY: Chhiatna tawh hmaa dinhmun ngai anga din leh theih nana chhungkua, vantlang leh Sorkarin hma a lak na tur te a ni. A hun chung chu kum hnih-khat mai ni lovin, kum 5 - 10 chung emaw, a aia rei zawk pawh a ni thei. Recovery atana thil tih tur pawimawh zualte chu Restoration (ngai awn lehna atana beihna ; Reha-

bilitation (chhawmdawl na hna) ; Reconstruction (Din thar leh na hna) te a ni.

5.7. DEVELOPMENT: Mizo chuan hmasawna kan ti mai a, Disaster management-ah chuan, insiamthat leh na emaw, chhiatna tawh hmaa ram leh khaw hmelmang ngai aia changkang leh tha zawka indin thar leh na tih a kaw ber. Recovery-ah kha chuan chhawmdawl na peng hrang hrang leh a thawh dan a ni deuh ber a, inanna lai awm mah se Development hi chuan chhiatna tawh hma aia san zawka leh changkanna lam a kaw bik a ni.

6. MIZORAM LEH DISASTER

Awle, Para 3 na a kan tarlan tak chhiatna thlent u hrang hrang te zingah Mizoram a thleng maithei, thleng fo leh mek thenkhat leh chhiatna dang te thlir thuak thuak ila.

6.1. LIRNGHING: Tunlai khawvel thiamna changkang takah pawh Lirngging hun, hmuntur leh a nat dan tur sawi lawk theih a la ni lo chung hian kan ramah hi chuan Mihlim leh Zawl thupuan hmang te pawhin an hrilhaw a, mi tam tak an chia thin. US Geological Society pawhin '...dan theih loh sawi lawk theih baw loh..' an ti tawp mai a ni. India Earthquake Zone hi India ram a lirngging lam kaihnawih Scientific Organisation/Institute atanga mithiam kal khawm ten tun hma atanga lir lo nghing tawh dan history te, ram leilung pian chhuah dan leh pian to hrim hrim te leh leilung awm dan zirna atangin an siam a. Vaw 6 zet (1962, 1967, 1970, 1975, 1984, 2002) an siam chhuah that tawhah India hmarchhak pum te, J&K, Himachal Pradesh leh Gujarat hmun thenkhatte hi Lirngging

na tak tak thlen mai theih na hmun Zone V ah 1970 atang khan min la dah ngar ngar a ni. He mi Zone V a awm ve state dangah hi chuan Lir na tak mai hi a thleng deuh vek tawh a. India hmarchhak ah pawh Kum 1869, 1897, 1950 te khan na em em in a lo nghing tawh a, Mizoram chhungah nghing chiah lo mahse thenawm ram a a nghing chuan kan tuar ve hle thei tho a ni tih i hre thar leh ang u.

Lirngging chu leilung sakhat thaah a nghawr a na a, leilung thawl deuhah a na nep deuh thin a tiin dik mang lo takin kan in thlamuanna a; Lirngging na tak mai thlen theihna Zone 5 naah awm mah ila, eng ang a na lirngging pawh lo thleng sela kan leilung thawl leh muk lo tak hian chu lirngging nghawr chu a lo hip emaw a lo tinep thei dawn a ni tia a kan in hnem thin hi a dik chiah lo. Khawvel hmun hrang hrang a lirngging thleng tawh hrang hrang te zir chianna atang a an hmuh chhuah chu Mizoram ang leilung nei a saptawngin Sedi-mentary rock chi, leilung muk lo leh hnip (Soft sediment leh soft soil) ah te hian lirngging nghawr hi leilung chang tha aiin a let enggemaw zah a nain a thawk na thin tih a ni tawh tlat mai a. Lirngging na tak mai Mizoram chhungah emaw kan ram thenawm hnaivai ah nghingta mai se, kan lei muk loh avang leh insak dan mumal lo baw nen, Min tur, chim tur, tluchhe tur kan tam hle mai ang tih a hlauhawm hle. Chuvangin in sakna hmun, sak dan, sak chin tur, hmanrua leh in chhungrem daniuluk hle ang u.

Tin, Lirngging kawng te pawh kan sawi baw thin. Lirngging kawng han tih a pan lam nei a, lamlian ang deuh a lir a

nghing pawh a zawh leh thawkna bik tur leh kawng tum nei ang a ngaih a, sawi chi a ni lova, hei hi chu tawngkam dik lo niin a lang. A chhan chu lir a lo nghing hian a nghin na lai hmun leh a chhehvel ram zau tak tak a nghawng a, kawng zawh bik nei a nghing lovin a ram tuamin a tuam thina, chulai a ram tuam leh nghawng chin a ram leilung nghet lo leh khikak tam lai te leh a sihnip lai te chu a nghawng na bik deuh mai a ni. Chuvang chuan Earthquake Zone kan sawi na a nih loh chuan Lirnghing kawng tih chu a fuh lo deuh in a lang.

Pathian khawngaihna avangte pawh a a ni ang; lir nasa chu kan la tuar lo chu a ni a, engtikah emaw chuan a lo thlen hmel si a, "Inchung pawp bel that hun chu Ni sen sat lai a ni e". - J. F. Kennedy chuan a lo ti a. Lir chu nghing thei mai reng a ni tih hria in inven lawkna leh a tawrhna tinep tur a hmalakna, chhiatna nasa kan tawh lohnan a fimkhur na tur thil te ngai pawimawh hram hram ang u.

6.2. LEIMIN: Kumtin a chhiatna leh buaina kan tawn fo Leimin hi a chhan thenkhat te chu kan leilung sakhat lo te, ram leilung awih, ruahtui tla tam, kawng laihna, in leh lo dinna tur a laih nasat, ramngaw thing leh mau chereu nasa, tui hawk luankawr mumal lo leh tui chhia leh Zun In leh Ek In tha lo, leivung leh hnawl chhekkhawm nasat avang te a ni. Hengte hi a mal theuh pawh a leimin a thlen theih bakah chhan hrang hrang te hi thawk ho vin leimin a thlen fo thin. Mi ramah chuan Leimin hi Khuarel chhiatna (Natural Hazard/Disaster) anih laiin kan ramah chuan Khuarel leh Mihring thlen chawp chhiatna kan ti thei ang. A pumpelh dan tur chu

inhrilh inhrilh ngai lovin tute pawh in kan hre awm e. A hautak lo thenkhat Tuidawn tha tak mai neih tih te, tui chhe paih fimkhur deuh, tuihawk luankawr mumal tha, Ek In (Septic Tank leh soak pit) siam uluk deuh, leivung leh hnawl chhekkawl teuh loh, polythene hman tlem leh hman hnu paih fimkhur tih te hi mi zawng zawngin zawm ila a tha hle. Sorkar lam pawh in Landslide Zonation leh Building Regulation tha tak siam zel sela.

6.3: THLI, RUAH LEH RIAL: Kan ram ah hi chuan Thlipui avanga tawrhna nasa tak, mi tam tak thihna la tawng chiah lo mah ila, a khaw mal ang leh tlangdung ang ten Thli, Ruah leh Rial hi kan tawng fo mai a. Kan khaw awmna hmun sang lai anih thin avang leh kan in leh lo ten an zir thin avangin In leh lo ah harsatna a thlen chawk thin. Tuifinriat kan hnaih ber Bay of Bengal hi Cyclone imun tan duhna hmun tak a lo nih tlat avangin Thlipui leh a behbawm bakah a siper hi kan la tawng kan la tawng dawn a nih hmel a, hei vang hian India ram a Wind and Cyclone Hazard Map ah pawh a hlauhawm ber pawl (Very High Damage Risk Zone) ah min dah a ni. Kumin 2008 April - May thla a Myanmar a thlipui na zet mai Cyclone Nargis pawh kha Bay of Bengal atanga rawn in tan a ni. Thlipui chuan imun chung a neih bakah a kalkawng zawh awm te, a thawt chakzawng, engtik hunah nge chumi khami ram chu a rawn thlen ang tih leh a nihphung dangte hi a hriat theih deuh thin a, chung chu Television ah te leh Internet lamah te puanzar a ni vat thin a. Hei hi keini Very High Damage Risk Zone a awm state a mi te chuan ngaihven ve deuh reng a ngai a. Inhmakhua lawk a, tawrhna tinep turin tan lak a tha hle.

6.4: IN KANG: In kang tam tak hi chu kan inthlahdah vang a ni fo. Fire and Emergency Service te chhinchhiah dan chuan 2009 kum khan Kangmei chhuak vawi 143 ah in kang chhia 27 leh nunna chan mi 3 an awm a, 2010 ah Kangmei chhuak 210 ah in kang chhia 37 leh nunna chan mi 5 an awm a, 2011 ah Kangmei chhuak 139 ah in kang chhia 51 leh nunna chan mi 12 an awm a; 2012 (Jan - Oct) ah Kangmei chhuak 288 ah in kang chhia 150 leh nunna chan mi 5 an awm der tawh zu nia; In kan na chhan thenkhat chu Mei tih mih chian tawh loh vang, Mombati chhem hlum mumal loh, Vawkchaw chhumna hnaivai, Sarep vil that loh, Ar In a eng chhit atangin, Khawnvartui leh Petrol atanga kang kai, LPG cylinder atanga put leh puak te leh Electric short vang te leh a dang te an ni.

In kang tamtakah Electric short kan puh hi chu a dik vek hmel loh. Kan inthlahdah avang emaw chhan dang dang vang a kangmei chhuak hi thiam lo nih duh loh vangin, mualpho hliah nan Electric short kan ti ni mai in a lang. Electric wiring dik leh hmanraw tha hmanga wiring a short mawh viau. Kut themthiam deuh, thiam ve tho a in ngai te kan wiring tir a, earth line siam dan dik a siam silovin, a then chuan a hruipui a mi te kan bat ru a, kan pawh ruk chiah loh pawhin energy meter hmaah hrui pawt pengin kan hmanga, mi tam tak chuan kan connection load phal zat ang duhtawh lovin kan pawt peng darh vak thin leh nghal a, kan tek chhuai chhuai lo zawk hi mi dik lo vannnei kan ni ringawt. Kan fimkhur tlan deuh a hun tawh khawp mai a ni. Kang thei thil, Diesel/Petrol, Khawnvartui, LPG bur te hi hmun khatah dah khawh teuh lo a tha hle.

In kang kan beih dan pawh tlem a kan thlak deuh a tha hle. In a kan chuan In kan thu au ri emaw kan hriat veleh a thei thei kan tlan chhuak a, mei thelh kan tum thin. Thil tha tak chu kha tia kan tlan chhuah pah khan kut ruak mai a tlan chhuak lovin kang thlehna tur hmanrua kan neih ang ang tiang emaw Tin a tui/balu emaw tal chhuah pui theih nise. Tin, kan tui khai a miin kan theih ang tawh a kan theh hnuah mahni theuh a tuizem hnaivai a mi va thal a, mei va theh leh thin ai chuan a thei thei intlar-in, tui tin awm ang ang chu tin khat leh tin ruak kalna siamin in hlanhhawn diat diat ila tichuan chhum lo chat lovin tui in mei a thelh reng theih dawn a ni.

6.5: RAM KANG (FOREST FIRES): Ramngaw hian chhiatna a tawh zinga langsar ber chu Ram Kang (Forests Fires) hi a ni a, Ramngaw hausakna chang a tichhe lo va, ngawa cheng nungcha tinrengte leh ngaw chhung thing leh mau te leh sik leh sa te chenin a tibuai zo thin a ni. Nipui lai, ruahtui la tlak hma si hian, ngaw leh thing hmunte a lo ro re ru a, thinghnahte a tla kawh a, hnahtel a lo ro rip riap lai hian mei siper mai pawhin kangmei a siam hluai thei thin. Ramkang hi khawvel sik leh sa lumlet avangin a lo awm ve fo mai. Lei tuamtu boruak lum leh sa leh lei boruak ro innawh hian ramkang a siam thei a. Ram tam tak a ramkang lo awmna chhan chu Tek tla (Lightning) hi a ni. Mihringte avangin a chhuak fo bawh.

Ramkang hi hunbi neia awm a ni chawh. Thal khaw ro tirh lama awm thin a nih tlangpui avangin invenlawkna mumal takin a ruahman theih a ni. Ramkang tur venna tha ber chu a darh zau theihna tur

kawng tihbo hi a ni mai. British hunlai khan, ngawpui kan loh nan a ri den dena kang thei tur chi hnawkte thianin, Mei kawng (Mei-lam kan ti baw) satin nipui a lo thawh dawn apiang hian beihpui an thlak thin a ni. Hei hi a hmingah "Forest Fire Line" - "Mei Kawng Sah" an ti. Hetianga hnaw thenfai hian, hmun khata kangmei chhuakin hmun dang emaw Ramngaw a kang kai tur kha a veng thin a ni. Mei kawng sahnaa hnaw leh hnim an hnawl khawmte chu hmun him chinah an hal ral nghal zel thin. Kangmei lo tai darh nachhan ber chu a man phak tur hnim ro emaw thil dang alh mai thei chi a hmabaka a lo awm zel avang a ni. Chuvang chuan 10ft - 15ft zauva phul hnim leh ngawpui inkar tihfai hliau mai chuan Ram kang tur a him phah thei.. A lo a finthlak hle mai. Lo hal dawnin tha tak a Meikawng sat thinin, thal khawro dawn apiangin ngawpui ri ze ze hi meikawng sat ta vek mai thin ila, meizial leh sikret bung tihlum lovin paih mai mai lo ila, nawmsipbawl nan ram hal mai mai lo tlang baw ila ramkang a tlem phah ngei ang.

Tui hmanga tlang sang leh kham kara ramkang hlauhawm tak mai thelh rem tur chuan a hautak lutuk a, tih vek theih ni lovang. Ram changkangah te chuan hetianga Ramkang thelh nana a bika siam Thlawhtheihnate hmangin tuiin an phuh chuai chuai thin a. Mahse kan ramah chutiang chu kan la nei rih si lo a. Ram a lo kang a, hun rei tak chung a kang hluah hluah a, ramngaw tha tak tak a kang kaw hiam huam mai thin anih hi. Ramkang tur inven lawk nana thil pawimawh thenkhat te chu:

- (a) Ramvak leh chhuak ten kan meizial bung leh meichhem tihmih chian hle tur.
- (b) Thil hal chak leh nuam ti mi te pawh insum hram hram tur.
- (c) Bawng vulh hian a kum leh hisapin an hal thin nia hriat a ni baw. Hetiang avanga ramngaw zau zawk a kan loh nan Ran chaw zawn phal chin leh chin lo siam fel a tha ang.
- (d) Thil mut sam leh kang thei chi reng reng meichhemna hmun emaw thil halna hmun hnaihah dah loh tur a ni.
- (e) Mei chhemna hmun reng reng enthlithlai leh ven ngun tur.
- (f) Awlsam taka mut thei leh kangkai awlsam chite reng reng chhek khawm emaw paih vum ther thur loh tur, chutiangte kan dahkhawm/chhek khawm a nih pawhin kangmeiin a man theih loh tur, hmun him tawkah paih khawm tur a ni.
- (g) Chenna in sak dawn reng rengin kangthelhna hmanrua lam chite ruahman tel ni se.
- (h) Ram a lo kan hian a thelh thuai a ngai thin a, hetianga kang thelh tur chauh ni lo hian, ramkang awm leh awm loh lo thlithlai reng a, hmuh a nih veleha midangte hriattir nghal vat tura duty a ngai a ni.
- (i) A khat tawka kang thelh dan zirna buatsaih fo a pawimawh.

Ramkang hian meikhu nasa tak a siam bakah boruak (gas) tha lo, mihring tana natna thlen chi hlauhawm tak a tichhuak thin tih hriat a ni. Thing leh hnim kang hian Carbon Dioxide chauh a pe chhuak lova, mihringte tana hlauhawm chi boruak Noxious Gase (Green House Gases) an tih chi hrang hrang, carbon monoxide te, Methane te, hydrocarbons te, Nitric Oxide leh nitrous oxide hote - khawvel lumna tizualtu leh Ozone layer tikawnkawtu te hi a siamchhuak bawk a ni. Hetiang boruak tur nei (toxic gases) lo chhuak thin avang hian mi sang tam takin thawk lama harsatna (respiratory problems) an tawrh phah ta thin reng a ni.

Ramkang leh phul emaw hlobet kang thinte hian khawvel lo lum chho mek zel hi nasa takin a ti punlun a. Khawvel boruak inlumlet mek zelah hian Ramngaw a thinghnahte hian Carbon Dioxide sosang tur pawlh dal hnaah pawimawhna thuk tak a nei a. Ramngaw te, phaitual hnim leh buh-bal chinna ramte hian khawvel boruak nunna atana pawimawh chi a siam thin a, tunah zawng chutiang kan nunna siamtu langsar tak takte kang khu avangin harsatna kan tawk mek a ni.

Kan ramngaw te buh-bal chin nana dim lo taka kan han vat chereu pup pup mai te hi lei chunglang chak taka luan ral thuai thuaina tur kan siam lek a ni mai. Ramngaw te hi mihringte leh nungchate nunna atan an pawimawh em avangin a kan lohna tur leh ramkang zel tur venna turin ruahmanna tha leh chipchiar tak kan neih pawh a ngai a ni.

Sawrkar chuan chuan kum 2000 khan Village Level Fire Prevention Committee

chu khawtin V.C te kaihhruaina a din tur in a ti tawh a, hetiang tualchhung mipuite ramkang ven kawnga an lo intahluh ve takna hian tunlaia kangthelhna hmanraw changkang zawk bakah mahni thiam leh tih dan phung pangngaitte hmanga thawhhona tha tak kan neih phawt chuan ram kang zel tur venna ah leh ramngaw din that leh na ah hian awmzia thui tak a nei thei ang.

6.6: KAWNG-A CHETSUALNA (ROAD ACCIDENT): Kawngpui a lirthei a chetsualna hrang hrang hi theih ang tawk tawkin kan lo chhinchhiah ve zel a. Kum 2007 chung khan Mizo te tel ve na lirthei chesual 59 a thleng a, Mizo 60 leh Vai 3 an thi a; Mizo 106 leh Vai 13 in hliam an tuar a. Kum 2008 ah Mizo te tel ve na lirthei chesual 43 a thleng a, Mizo 38 an thi a; Mizo 37 in hliam an tuar a. Chanchinbu a lo lang kan hmuh te chauh an ni a, chanchinbu a lang lem lo chetsualna leh chanchinbu a lang, mahse chhinchhiah hmaih pawh kan nei nual thei bawk awm e.

Mizoram Statistical Hand Book a alan dan chuan kum 2008 - 2009 chhungin lirthei chesual vaawi 94 ah mi 54 an thi a, mi 153 zetin hliam an tuar a ni. Kumtin chawhrualin nunna 50 vel kan chan ti ila a dik thei ang. Chetsualna chhan thenkhat chu Lirthei khalhtu leh a chuangte zu leh ruihtheih dang ruih vang, fimkhur loh vang, lirthei chiangkuan loh vang, tlan chak lutuk, Kawng chhia, zim, nal, kawi lutuk, phur rit (over load) lutuk vang, Helmet khum loh vang te leh ke a kal ten lirthei hlauh loh lutuk vang te an ni a, chhan dang dang pawh a awm thei ang. Motor khalhtu te kan fimkhur a tha hle. Dan leh Thupek kengkawh tute an khawng deuh pawhin

mipui in thuawih thiam a pawimawh. Lirthei Gear nei chin khalh thei tur hian kum 18 tlin a ngai a, mahse khawlaiah School Uniform ha, lirthei gear nei khalh an awm fur mai a, lehkha an zir muang deuh a ni mai thei e. Thuneituten enfiah a tha hle, nu leh pa te pawhin an khalh thiam tho tih vangin kan fa kum la tling lo te tan Lirthei leh Driving License neih sak thin lo ila. Tin, chetsualna a lo thlenin engemaw thu hnu awm thei anih avangin khawhsawn chi leh chi loh thliar thiam a tul hle. Hliam tuar te kan bawhsawmin damdawiin hnaivai pan pui vat a tha.

6.7: TUI TLA (RIVER ACCIDENT):

Chanchinbua chhuak kan lo chhinchhiah dan chuan kum 2007 khan Mizoramah tui a tla Mi 14 an awm a, kum 2008 ah Mi 13 lai an tlahlum a, kum 2009 ah mi 18 an tlahlum a, 2010 ah mi 28 zet an tla hlum a, 2011 ah mi 42 zet, 2012 (Jan - Oct) ah mi 45 zet kan chhinchhiah der tawh bawk. Thing thiam thingah an tla a, tui thiam tuiah an tla tih thu kha a dik zel a ni ang. Fimkhur tlan deuh a tul, pawng intih thiam lutuk a pawifo, lui zei zia hriate thurawn pawisak te, naupang rual chauh lui a kal tir loh te, in ven theih aia tam lui a kal ho loh te tul a ni. A chhan leh vang chu engpawh lo ni se, kan in buaipui dan hi han sawi zawk ila. Mizo danah ruang hmuh hma chu ni 7 leh zan 7 in zawn tih a la ni si a, chung leh khat mai ni lokhawtlang in kan inzawna lama hna kan thulh chu engpawh lo ni se, tui hleuh thiam hauh lo pawh a thei thei kan liam duak a, luikamah kan thu nghuk mai a, an tlakna bul a veng leh khua mipuite kan ti hah lutuk a ; mi ruang zawng a tui a luh bakah kan ei leh in tur buaipuiin an buai fo

a ngai thin hi a fel tawk lo hle. Chubakah luikam hnaivai a thlai huan leh nul hmun siamte thlai kan tih chhiat sak fo bakah ril a tam chuan lak mai a lo awl a, an kum tluan thawh rah kan ti chhiat sak fo thin hi a tha lo hle. In lam a awm turte, lui thleng a kal tur te, lui a kal te tih tur leh awm dan tur leh chin te, ei leh in inpek dan ruahman na te neih thin a tul em em a ni.

6.7: Khing chhiatnate bakah kham, thing, tukverh leh in chhawng atang a tla, ramvak inral palh tih te Tek den leh Rial tlak avanga tawrhna te pawh kan hriat zauh zauh thin hi. Kan inbuaipui danah chanvo insem zai leh kawng kalhmang mumal deuh a kan in kaihhruai a hun ta hle mai.

6.8 : DISASTER MANAGEMENT COMMITTEE LEH TEAM: Sawrkar hmalakna in State Disaster Management Authority leh Executive Committee te, District Disaster Management Committee, Block Disaster Management Committee leh Village Disaster Management Committee duan a ni a. CYMA pawhin ngai pawimawh in kum 2001 daih tawh khan Disaster Management Committee a lo din daih tawh a ni. Branch YMA member te kan tel ve na Village Disaster Management Committee hi V.C te kaihhruaina in Sawrkar chuan veng/khaw tinah Village Level Disaster Management Committee dinin V.C lam atangin Chairman awmin Branch YMA President/Secretary emaw Tlawmngai pawl atangin Secretary chanvo min chelhtir thin a. Anni hi veng huam chung a harsatna leh rikrum thil lo thleng ta se, buaipui vat thin (First Responder) an ni a, an kut ke turin heng a Team hrang hrang din te hi an din ang.

- Early Warning and Information Dissemination Team
- Shelter Management Team
- Evacuation & Rescue Team / Search and Rescue team.
- Health & First Aid Team
- Water & Sanitation Team
- Relief Coordination Team
- Damage Assessment Team
- Counselling Team
- Carcass Disposal Team
- Patrolling Team

Heng Team te hi an hming atang hian an hna tur awm chu a chiang mai awm e. Team engngemaw berah khian kan awmve anih chuan thahnemngai tak leh tlawmngai tak a kan tel a tha hle.

6.9 : ENGTIN NGE NI ZEL? Kan ramah chuan chhiat tawk an awm chuan a thei thei kan han che chhuak vat thin a. Hetiang hun a lo thlena chhanchhuahna hna kan thawh dan erawh hi chu kan bihchian deuh a tha awm e. Hmun thenkhatah chuan kan hel nuai deuh niin a lang a. Hliamtuar la chhan tlak ngawih ngawih pawh kan ti chau zual thei a, bungrua la hmantlak tur ngei pawh hmantlak lovah kan chhuah thei. Chuvangin chhanchhuah hna kan thawhnaah awmze nei (systematic) taka tih hram hram a tha.

A tawng ring ring thu hi a fing ber lem io fova, val upa leh khawtlang hruaituten rang taka remruat zung zung thin ni thei se a duhawm hle. Tlawmngaia lo thawk chhuak ta chu han in hauh leh rih kha a rem tawh chiah si lova, a nawlpuia tih chi loh thilte pawh tam tak a awm thin a, a chang pheh chuan tlawmngaia lo inthiar fihlim a

tul tumte pawh thil awm thei a ni. Hetiang hunah hian ngaihndan hrang hrang a tam tawh thin a, chuvangin ngaihndan fing leh remhriate ngaihchan thiam a pawimawh hle.

Chhanchhuah hna thawktuten harsatna an tawh fo thin chu hna pawh thawk ve chuang lem lo, hmuhnawm thlira lo thlirtu mipui pungkhawm tam lutuk thin hi a ni. Hna thawk ve thei pawh ni lo, nunau, hmeichhia leh naupangte pawh hi kan hawkdak lutuk deuh a, hnathawktu dipdaltu leh hnawksak kan tam thin hi kan sim a hun tak zet a ni. Chak tak leh awmze nei zawka chhanchhuah hna thawk tur chuan dipdaltu an awm tur a ni lo. A pawnga puia kan in chim luih luih hian inhliam belhte a hlauhawm a, chubakah hna a kal chak thei thin lo.

6.10: ENGTINNGE KAN TIH TAK ANG LE? Chhiatna thlen hma, thlen lai, thlen hnu a tih tur leh tih loh tur te kan inhrilh vek seng lo va, heng a hnuai a mi te tal hi chu ngai pawimawh ila.

1. In i sak dawnin mithiam (engineer leh architect) te rawn hmasa la, hmanraw tlawm ringawt um lovin a tha ngei hman tum ang che.
2. In inchhungah bungraw rit, mi delh na thei tur chi chu a sangah dah lo la, i lo dah a nih chuan lirngchingin a rawn sawi tlak chuan a delh palh hlauh ang che.
3. Lir a lo nghinin chia mai lo la, khum hnuai emaw, dawhkan hnuai-ah emaw awm la. Nghet takin dawhkan/ khum ban chu dawm ang che.

4. Lir a nghin laiin tukverh darthlalang bulah awm lo la, thil rit rawn tlak mai thei tur che bulah awm lovang che.
5. Electric hrui chat leh inzam mumallo i hmuh chuan P&E deptt.-ah hriattir vat la, mahni a khawih loh tur.
6. Eirawngbawlna Gas chu i hman zawh rual rualin a regulator-ah off ziah la, chawhmeh kan nana i tel (oil) chhuan a alh palh a nih pawhin rang takin a regulator-ah off vat zel ang che.
7. Gas cylinder dahna chu a phui lutuk tur a ni lova, a rim a lo chhuak (leak) a nih chuan a bul hnai kawngkhar leh tukverhte hawng la, nawalh/lighter, thil tikang thei chi reng reng hmang lovang che.
8. Chaw, chawhmeh etc., Gas-a i chhuan laiin chhuahbo san suh. I lenchhuah dawn reng rengin in Gas chu i off fel em tih finfiah ziah rawh.
9. Chhiat tawhna hmunah chhanchhuahna hna i thawhin ngaihtuahna fim tak hmang la, hliam, nunna chhan theih an awm em tih ngaihtuahin an nunna chhan tum hram ang che.
10. Harsatna i lo tawhin, tanpuitu i mamawh thei a, heng Telephone numberte hi nang lehichhungten hria ula, Police Station - 100; Fire Service - 101; Civil Hospital (Casualty) - 102.
11. Chhiatna lo thleng chungchangah thu diklo thehdarh hi a pawl thei em em a, thil hrechiang si lova hre ber ang mai a thu belhchian dawlo chu thehdarh loh a rin loh tur bawk tur.
12. I inah tuidawn tha tak siam la, tuilunkawr mumal takin siam bawk la, tuilunkawr mumallo avang hian lei a min fo thin a ni.
13. Kangmei chhuahna bul hnaiah i awm a nih chuan ngaihtuahna fim tak hman tum la, chiai suh. Bungrua aiin nunna a hlu zawk a ni tih hriain mihring chhan ngai an awm em tih ngaihtuah ang che.
14. In hlui, rawp tawh lamah i cheng a nih chuan thawmthat hna ngaihthah hauh suh.
15. Chhiatna eng chi pawh hi lo thleng thut thei reng a nih avangin in chhungkua-ah fimkhar a tul dante inhrilh hria ula. In himna turin ruahmanna (plan) siam ang che.
16. Mahni thawhna, pawl, leh veng ah Disaster Management lam training a awm chuan ngai pawimawh a, tel hram ang che.
17. Damdawi reng reng chhuar kawngkhar leh bang neiah ngei dah tur. Chhuar kawngkhar kalh theih loh emaw bang nei lova dah te hi Lirngching hlekah an tlu baw hma em em zu nia.

