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Congratulations! Thanks For Your Continuous Support !

To all our 32 SDP centres, it is our pleasure to have you in our registry. Congratulations to those who are prompt in sending in their data; Sultanah Nur Zahirah Hospital, Likas Hospital, Sultan Abdul Halim Hospital, Sarawak General Hospital, Sg. Buloh Hospital. Keep up the good work!

The secretariat is up to date in keying in the 2008 data except for those centres who are yet to submit their data .

Reminder:

Coordinator, please submit your data by the second week of the each month

2006 Annual Report On The Go!

The study centres comprise 29 out of 40 NICU's in government hospital and one from a university hospital NICU. Nearly fifty per cent of deliveries in Malaysia are conducted in the MNMR hospitals, out of whom 61,758 are admitted for neonatal care and 10,387 babies in 2006 fulfilled the MNMR study criteria. Without the great amount of effort and team work by the doctors and nurse coordinators from each NICU and the registry staff to collect and coordinate the data, this study would not have been feasible and their hard work is much appreciated. It is hoped that all the NICU's in the study will look at its performance compared to the benchmark and continue to strive to provide better care through audit and quality improvement.

~ Note of thanks from the Chairman~



Welcome To eMNMR Web Application

Our website eMNMR Web Application is ready for use. Kindly visit our website at https://www.macr.org.my/enmr/zAu_login.jsp. Please get password from the secretariat in MNMR Selayang Hospital

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Event Highlights!!!

- CRC Year End Meeting on 11th & 12th December 2008, Institute of Medical Research (IMR)
- The 16th Annual Congress of Perinatal Society of Malaysia on 12th to 15th March 2009, Sutera Harbour, Kota Kinabalu

A Note from the Chairman – Dr. Irene Cheah

The 2006 annual report has been delayed due to unforeseen circumstances but I am glad to report that the study on the 'Outcome of Critically Ill Babies in the Neonatal Intensive Care Units (NICUs) in Malaysia in its third year has sufficient data to permit some analysis of the NICU care and the various outcomes, such as survival rates and rates of screening for retinopathy of prematurity over the three years; and compare outcomes such as survival rates, use of antenatal steroids, the rate of complications such as pneumothorax, chronic lung disease, retinopathy of prematurity across centres, as well as the use of treatment such as parenteral nutrition and surfactant in the care of preterm babies by the various centres. Variations in outcome arise out of various reasons pertaining to the data itself as well as variation of referral pattern and resources available. Risk adjustment would be one of the things to look at for future analysis.

I would like to thank the steering committee members who have worked hard to prepare the 2006 annual report. The committee is also in the midst of preparing the 2007 annual report and free papers for journal publication. I hope that the SDP hospital heads have been able to retrieve data of their hospitals from the secretariat. With the e-web MNNR application, current reports of your NICU can now be generated on-line and downloaded easily provided your data is updated.

The steering committee would like to thank Tan Sri Dr. Ismail Merican, Dato Dr.Zaki Morad, Dr. Lim Teck Onn, Dr. Hussain Imam and Dr. Goh Pik Pin for their constant support. We would also like to record our gratitude to the late Dato' Dr Lim Nyok Ling, the past Chairman, for having persevered in the setting up and building the foundations of this registry.

Several papers arising out of this data have been presented at national conferences and certain forums. It is also hoped that further studies including auditing of NICU care will be stimulated out of findings from this database, and will lead to continuous quality improvement in NICU care and journal publications.

In Memory of Our Late Dato' Dr Lim Nyok Ling

(A founding member & ex-Chairman of the Malaysian National Neonatal Registry)



DPMP, JSD, MBBS(Malaya),
FRCP (Edinburgh), FAMM
1955 to 2007

The late Dato Lim Nyok Ling was an eminent practitioner and a dedicated academician who touched the hearts of many of us who have had the privilege of being her friend or in her acquaintance at various times of her illustrious career.

Her numerous talents accompanied with vision, drive and determination has made the MNNR a functioning reality in addition to making outstanding contributions in other areas of her chosen field of neonatology and perinatal medicine.

For many of us, her memory will inspire us to always strive for the best in what we do and to make a positive difference to the world.

With fond remembrance,

Dr. Irene Cheah



What's New for 2009 MNNR study

For 2009, the training manual on data definition and the 2009 CRF's will be sent to the SDP's by the end of the year. A soft copy of the training manual has been sent to your Head of department. Changes to the inclusion criteria :

Additional criteria:

- 1) All babies with significant congenital anomalies delivered in your hospital (for year 2009 only)
 - 2) All babies with hypoxic ischaemic encephalopathy
- SDP's are reminded to select the "admission to NICU" at the top of the CRF or top part of web entry

Additional data entry after SDP meeting (as part of Paediatric Activity Performance Audit)

- 1) Central venous catheter associated infection
- 2) Catheter related ischaemic events

Training for e-Web MNNR data entry has been conducted and passwords given to selected staff in your NICU. Please refer to the training manual before data entry, and use the Help button available at selected radio buttons. Further assistance can be obtained from the secretariat.

For those requiring assistance with on-line data entry, SDP's should send your monthly returns by the second week of each month to enable current monthly reports from the e-Web application.

From the Registry Manager, Sr. Jennifer Loong

Greetings to all of you from our MNNR secretariat and a warm welcome to our two new staff who have joined us in August this year. They are Cik 'Aisyah Ruslan and Cik Fazliana Mohd Nasib, who are both capable, eager to learn and has been of great assistance to the registry.

I would like to take this opportunity to express my sincere thanks to all our doctors and nurses who are involved in the registry. In spite of your heavy workload in the wards most of you tried your level best to send in your returns to us on time. May I encourage those who often are late in their submissions to be more prompt and committed in their returns. Your cooperation and support is greatly appreciated.

We have conducted 3 days web application training for all our 32 SDPs attended by 64 Drs and nurses in August this year and user IDs have been issued to all the users in the respective hospitals. We are very pleased to note that a few of the hospitals have started data entry using the web application. Please do not hesitate to contact our secretariat if you encounter problems. May I remind you to design a proper tracking system in your hospitals so as not to miss any babies for this study.

The Steering committee met recently to discuss the 2007 report and the members are working very hard to get it published by early next year.

The MNNR and CRC sponsored some of our Drs and staff of the secretariat to the CREATE workshop on data analysis in October this year. All of us benefited greatly from this workshop and "Syabas!" to CRC for organizing such a comprehensive Seminar.

A special word of thanks to our Database Manager , Ms Lim Jie Ying and her team for all the assistance rendered during our web application training and in the design of our new CRF.

Last but not least our sincere thanks to the Statistician, Ms Lena Yeap for all her patience and help to generate our MNNR data for us.

Key Findings In 2006 MNNR Study

- ◆ Twenty-five percent (25%) of the study population were small for gestational age and there is a trend towards an increase in the percentage of SGA babies from 2004-2006.
- ◆ Babies born to mothers of *Orang Asli* ethnicity had the highest risk of fulfilling the study criteria, followed by mothers of *Bumiputra Sarawak* and *Bumiputra Sabah* ethnicity.
- ◆ Only 60% of mothers of 25-33 weeks gestation received antenatal steroids in 2006. There was marked variation in the use of antenatal steroids across centres, varying from 12-90% of preterm babies below 32 weeks GA.
- ◆ 7306 (81.0%) out of 9023 babies were inborn. For babies of less than 32 weeks gestation, 2426 out of 2902 (83.6%) were inborn. The overall maternal steroids used was only 55.2% with 60.3% use in inborn babies and 23.3% in the outborn. Inborn babies had a better survival rate particularly in the 701-900 birthweight category
- ◆ The Caesarean section rate for VLBW babies in the MNNR was 44%, low compared to that of other neonatal networks such as the Vermont Oxford Network which had a VLBW Caesarean section rate of 69%.
- ◆ Other than in the birthweight group 501-1000 grams, less than 50% of the babies with RDS received surfactant within 2 hours of life.
- ◆ Survival of babies up to 31 weeks and up to 1500gms improved progressively with increasing gestation and birth weight. Over the last two years, there is a 10% increase in survival rate for the 701-800 gram birth weight group. There was marked difference in survival between babies below and above 700gm birth weight ie from 22% survival rate at 601-700 grams birth weight group to 43% survival at 701-800 grams birth weight. The survival rate of babies between 1001-1500 gm birth weight, which is the key performance index for government NICU's, according to centres varied from 74-92%. The survival rate of babies between 501-1000 grams birth weight varied from 31-65%.
- ◆ The rates of chronic lung disease as defined as the requirement for oxygen supplementation at Day28 and 36 weeks GA were 18.9% and 5.5% respectively for the survivors of between 501-1000 gram BW, a drop from 46.2% and 18.3% respectively in 2004. The rates among babies with birth weights 1001-1500g were 7.0% and 2.3% at Day 28 and 36 weeks respectively.
- ◆ 11% of all babies had one or more episodes of confirmed bacterial sepsis. In this group, mortality rate was 26.9% in contrast to a mortality rate of 19.6% in babies without confirmed bacterial sepsis. The infection rate is highest (21%) in the birthweight group 501-1000 gm followed by 14% in the group of 1001-1500 gm BW.
- ◆ 9.3% of babies above 2000 grams birth weight were reported to have hypoxic ischaemic encephalopathy (HIE) - 69.4% had mild or moderate HIE and 30.6% had severe HIE. Severe HIE was more common among the outborn babies (44.6%) than the inborn babies (27.5%) with HIE, with mortality in 70.2% of those with severe HIE as compared to 10.7% HIE.
- ◆ 18.5% (1922/10387) of infants had congenital anomalies. The incidence of congenital anomaly was 185 per 1000 births. Amongst infants with congenital anomalies, the mortality rate was 57.8%.

Photos of MNNR Activities



MNNR Secretariat



Web Application Training in August



Web Application Training in August

~Words From A Member~

Whenever we talk or write about the late Dato' Lim, nothing else than superlatives of the highest order come to our mind to describe her achievements and her personality. No matter how nice and superb our wordings, we always try to find something better to express our feelings since words quite often fall short of truly expressing what Dato'Lim has meant to perinatology in Malaysia and to what she has meant as a friend to all of us.

In this newsletter we would like to highlight the major role she played in establishing and running the MNRR. With her great vision on neonatology and perinatology for Malaysia, she saw the need for a well organised and reliable data collection about our premature and sick babies. In her belief that anything is possible, she went on to convince the huge majority of government doctors, not only MOH but also some doctors of the universities that they should participate in such a data collection. Through her wide networking and CRC's assistance, she found the funding for setting up the MNRR.

She employed very skilful and motivated people among whom our favourite Sr. Loong, to get the database running. It is hard to imagine how much time and effort Dato Lim and her staff must have put in to get all these data in and cleaned up and analysed for the first time. She ensured that government funding came in and she adroitly managed to call famous speakers who happened to be in Malaysia to become resource persons of our NNR forums, providing extra funding.

Now, the fruits start showing. All centres are now capable of comparing their outcomes with the national means and can improve on the areas where they lag most behind first. We have had multiple presentations and people start approaching us to use some of our data to write publications. Our steering committee is meeting halfway December 2008 to write up multiple publications and hopefully we can get them published internationally. Thank you so much Dato' Lim.

With the help of all of our participating centres and we wish that we can fulfil the vision and further improve our care not only at par with other countries but even better. It is hard to understand why Dato' Lim had to leave us so early. Perhaps the best way to honour her, is to continue and try to expand all her initiatives and make neonatology and perinatology centres in Malaysia true world champions.

~Written by a grateful member of the MNRR~

Photos of MNRR Activities



SDP Meeting in October

Steering Committee Meeting



Steering Committee Meeting