

Proceeding



PROCEEDING

# International Conference on Restorative Justice

4 January 2014, Grand Tjokro Hotel, Yogyakarta

Consumer Protection  
"Law and Pharmacy Perspectives"



Ahmad Dahlan University



Published by:  
Faculty of Pharmacy Ahmad Dahlan University, Yogyakarta  
In corporation with:  
Faculty of Law Ahmad Dahlan University, Yogyakarta

Proceeding

ISBN: 979-18456-7-8



9 789791 845678

Consumer Protection: "Law and Pharmacy Perspective"



**PROCEEDING**  
**INTERNATIONAL CONFERENCE ON RESTORATIVE JUSTICE**

**Theme :**  
**Consumer Protection: “Law and Pharmacy Prespective”**

Keynote speaker:

**Drs. Bayu Teja Muliawarman, Mpharm, MM, Apt.**  
**Deputy Health Minister of Republic Indonesia**

Speaker II

**Dr. (Jur). Nils Wagenknecht**  
**Deutscher Akademischer Austausch Dienst (DAAD) , Germany**

Speaker III

**Dr. Syed Azhar Syed Sulaiman (Assoc. Prof.)**  
**School of Pharmaceutical Science, University Sains Malaysia, Penang Malaysia**

Speaker IV

**Huzna Zahir**  
**YLKI (Indonesian Consumers Protection Foundation)**

Speaker V

**Dr. Dyah Aryani Perwitasari, Ph.D., Apt**  
**Clinical Pharmacy Department of Ahmad Dahlan University, Indonesia**

*Saturday, January 4, 2014*  
*Grand Tjokro Hotel, Gejayan street No. 37, Yogyakarta*

**Editors:**

Dr. Laela Hayu Nurani, M.Si., Apt  
Dr. rer. nat. Endang Darmawan, M.Si., Apt

First Publisher, April 2014  
ISBN: 978-979-18458-7-8  
21 x 29 cm; xlii + 152 hlm

**Published by:**  
Faculty of Pharmacy Ahmad Dahlan University, Yogyakarta  
In corporation with:  
Faculty of Law Ahmad Dahlan University, Yogyakarta

## Tabel Of Content

Welcome Address from Chairman of Organizing Committee .....	ii
Welcome Address from Rector of Ahmad Dahlan University.....	iii
Tabel of content.....	v
Script of Drs. Bayu Teja Muliawarman, Mpharm,MM,Apt. ....	viii
Script of Dr. Nils Wagenknecht .....	xiv
Script of Dr. Syed Azhar Syed Sulaiman (Assoc. Prof.) .....	xix
Script of Huzna Zahir.....	xxxi
Script of Dr. Dyah Aryani Perwitasari, Ph.D., Apt .....	xxxvi
The Organizing Commite.....	xlii
<b>ORAL PRESENTATION</b>	
LEGAL TERMS OF USING HARAM ELEMENTS IN MEDICINES; COMPARISON STUDY BETWEEN RULE OF FIQH: 'AL-DZARÚRATU TUBÍHU'L MAHDZÚRÁT' AND THE DRAFT LAW ON HALAL PRODUCT WARRANTY .....	1
F. Muhammadi	
QUALITY OF LIFE OF SCHIZOPHRENIA PATIENTS' IN PRIVATE REHABILITATION CENTERS IN YOGYAKARTA .....	9
<u>F.A. Suhartono</u> <sup>1</sup> , D.A Perwitasari <sup>1</sup> , I.A.W. Agni <sup>2</sup> .	
GIVING OF ORAL COUNSELING BY PHARMACISTS IMPROVE QUALITY OF LIFE OF HYPERTENSIVE PATIENTS IN RURAL PRIVATE HOSPITAL IN BANTUL DISTRICT YOGYAKARTA .....	16
<u>R.Alfian</u> <sup>1</sup> , Akrom <sup>2,4</sup> , E.Damawan <sup>3,4</sup>	
DESCRIPTION OF LIVER FUNCTION OF SCHIZOPHRENIA PATIENTS' TREATED BY ANTIPSYCHOTIC IN PRIVATE REHABILITATION CENTERS, YOGYAKARTA ..	21
A , Wulandar <sup>1</sup> , I.A.W. Agni <sup>2</sup> , D.A Perwitasari <sup>1</sup> .	
PROTECTING CONSUMER MEDICINE IN INDONESIA: EXAMINING THE ROLE OF PHARMACISTS.....	26
N. Sari <sup>1)</sup>	
THE ADVERSE EVENTS OF ANTIPSYCHOTICS UTILIZATION IN SCHIZOPHRENIA PATIENTS' IN YOGYAKARTA PRIVATE REHABILITATION CENTER .....	37
<u>H. Agustina</u> <sup>1</sup> , I. A.W. Agni, <sup>2</sup> D.A. Perwitasari <sup>1</sup>	

SUCSESFULL TREATMENT OF SCHIZOPHRENIA PATIENS' TREATED BY ANTIPSYCHOTIC IN PRIVATE REHABILITATION CENTER IN YOGYAKARTA <u>F. Handayani</u> <sup>1</sup> , I.A WiraAgni <sup>2</sup> , D.A Perwitasari <sup>1</sup>	42
<i>Thymus vulgaris</i> L. INCREASED THE UREUM-CREATININE AND SGPT LEVELS ON DIABETIC RATS..... <u>J. Rahmawati</u> , I.W. Imastine, T. A. Sujono, A. S.Wahyuni, I. T. D. Kusuma, A. Suhendi, M.Da'i <sup>1</sup>	46
APHRODISIAC ACTIVITY OF <i>Lavanga sarmentosa</i> , BLUME KURZ (SALUANG BALUM) ROOTS ETHANOLIC EXTRACT IN MALE MICE ..... <u>Y. Musfirah</u> <sup>1</sup> , M. S. Bachri <sup>1</sup> , L. H. Nurani <sup>1</sup>	54
DESCRIPTION OF RENAL FUNCTION OF SCHIZOPHRENIA PATIENT'S TREATED BY ANTIPSYCHOTIC IN YOGYAKARTA PRIVATE REHABILITATION CENTERS <u>J. Janu</u> <sup>1</sup> , I.A.W. Agni <sup>2</sup> , D.A. Perwitasari <sup>1</sup>	58
ADHERENCE OF SCHIZOPHRENIA PATIENTS' IN PRIVATE REHABILITATION CENTERS IN YOGYAKARTA ..... <u>V. Rahayu</u> <sup>1</sup> , D.A. Perwitasari <sup>1</sup> , I.A.W. Agni <sup>2</sup>	63
IMPLEMENTATION OF SUBSTANTIVE JUSTICE IN THE CONSTITUTIONAL COURT'S VERDICT ON THE DISPUTE AGAINST THE RESULTS OF THE LOCAL CHIEF ELECTION..... <u>R. M. Nugroho</u> <sup>1</sup>	68
THE RELATIONSHIP OF PARENTING STYLE WITH DEPRESSIVE TENDENCIES IN CHILDREN OF SCHOOL AGED IN ELEMENTARY SCHOOL OF NGABEAN MAGELANG..... <u>E. Suhariyanti</u> <sup>1</sup> , F. Nadhiroh <sup>1</sup>	79
THE EFFECT OF CELERY AND <i>PHYLLANTUS NIRURY</i> COMBINATION ON URIC ACID LEVEL IN HYPERURICEMIC RATS ..... <u>E. Darmawan</u> <sup>1</sup> , N.L. Hidayati <sup>1</sup>	87
PHYSICAL PROPERTIES AND IRRITATION DEGREE OF GREEN TEA ( <i>Camellia sinensis</i> L.) EXTRACT CREAM WITH VARIATIONS CONCENTRATION OF VITAMIN C AS ANTIOXIDANTS..... <u>N. Sugihartini</u> <sup>1</sup> , F. Alimsyah <sup>1</sup> , Zaenab <sup>1</sup> , H. Susanti <sup>1</sup>	90
HYDROTHERMAL SYNTHESIS OF MCM-41: EFFECT OF HYDROTHERMAL TIME ON STABILITY OF MCM-41 ..... <u>M. Ahda</u> <sup>1</sup>	95

## POSTER PRESENTATION

- THE SEDATIVE EFFECT OF ETHYL ACETATE EXTRACT OF NUTMEG SEED (*Myristica fragrans* Houtt) POWDER FROM RESIDUE OF MACERATION WITH ETANOL 70% ON PENTOTHAL INDUCED IN BALB/C STRAIN MALE MICE .... 100  
M.S. Bachri<sup>1</sup>, N. Isnani<sup>1</sup>
- THE EFFECT OF COMBINATION TREATMENT INFUSE OF LEMONGRASS (*Cymbopogon nardus*) AND WATER LEMON (*Citrus aurantifolia*) ON THE TOTAL OF CHOLESTEROL LEVELS OF MALE RATS WISTAR INDUCED THROUGH GUAIL EGGS ..... 105  
V. Sofia<sup>1</sup>, J. H. Nuraini<sup>1</sup>
- EVALUATION OF RATIONAL ANTIBIOTIC USE IN CHILDREN WITH ACUTE DIARRHEA IN PKU MUHAMMADIYAH HOSPITAL OF YOGYAKARTA ..... 111  
S.M. Khoirunnisa<sup>1</sup>, T.M. Andayani<sup>2</sup>, Inayati<sup>3</sup>
- PERCUTANEOUS PERMEATION ENHACEMENT OF PROPRANOLOL GEL WITH TURMERIC (*Curcuma longa* Linn.) ESSENSIAL OIL ENHANCER ..... 123  
Wahyuningsih<sup>1</sup>, E. Rudiningsih<sup>1</sup>
- ANALYSIS OF THE GROWTH AND MORPHOLOGY CELL CHANGE OF *PROPIONIBACTERIUM ACNES* BACTERIA BY ETHANOL BINAHONG (*Anrederacordifolia (Ten.) stenis*) LEAVES EXTRACT AND SAPONIN COMPOUND ANALYSIS ..... 127  
N. Sulami<sup>1</sup>, D. Suhartanti<sup>1</sup>, L. H. Nurani<sup>1</sup>
- EVALUATION OF QUALITY OF LIFE IN TUBERCULOSIS PATIENTS ON STAGE BEFORE THE TREATMENT OF TUBERCULOSIS AND INTENSIVE PHASE Questionnaire *ST. George's Respiratory* Version INDONESIA IN SOME BP4 AND PUBLIC HEALTH IN YOGYAKARTA ..... 133  
R..Destriana<sup>1</sup>, D.A. Perwitasari<sup>1</sup>, U. A. Mulyani<sup>1</sup>
- ANTIBACTERIAL ACTIVITY OF 70% ETHANOL EXTRACT OF BETLE LEAF (*Piper betle* L) ON THE GROWTH, MORPHOLOGY CHANGES, AND PROTEIN *Propionibacterium acne* BACTERIA CELL..... 139  
D. A. Wardhani<sup>1</sup>, D. Suhartanti<sup>1</sup>
- EXTRACTION OPTION ETHANOL-WATER FOR EURYCOMANON CONCENTRATION ON PASAK BUMI ROOT WITH SIMPLEX LATTICE DESIGN METHOD..... 147  
L.H. Nurani<sup>1</sup>, I. Wahyuningsih<sup>1</sup>, A. Binarjo<sup>1</sup>

**CURRENT PHARMACIST' ROLE IN PREVENTING MEDICATION ERRORS TO  
DEVELOP THE MEDICATION SAFETY SYSTEM**

D. A. Perwitasari<sup>1</sup>

<sup>1</sup>Faculty of Pharmacy, University of Ahmad Dahlan Yogyakarta

**ABSTRACT**

**Background.** Medication error issues are often related to the medication safety and become the major concern in worldwide. Many factors are related to the medication safety system development and pharmacist is one of the factors which has significant contribution in building this system. This article was aimed to understand the role of pharmacist in preventing the medication errors and the role of pharmacist in developing the medication safety

**Method.** The review of some free full text English articles which was found in the PubMed for the last five years with the key words of: pharmacist role and/or preventing and/or medication error and /or medication safety was done

**Results.** There were 2 articles found with the keywords of pharmacist role, preventing, medication error and two more articles were found with the keywords of pharmacist role, preventing, medication error, medication safety. Pharmacist in the community and hospital has a very important role, especially in detecting, preventing and solving the prescription problems. Prescription problems could result prescription errors which is one of the type of medication errors. In some cases, the medication errors can lead to the unpreventable adverse events. Pharmacists can start some activities to prevent the medication errors and to participate in the development of medication safety system, such as: to review prescription, to make intervention to the prescription, to build the quality control and quality assurance system for pharmaceutical care and to start the report system of medication errors and adverse events

**Conclusion.** Currently, medication safety system is a need for the patients during their treatment. If pharmacists can ensure that the patients are in this system, the patients do not need the law system to make judgment of their treatment failure.

**Background.** Medication error is defined as any preventable event which could cause inappropriate medication use or patient harm while the medication is under the control of the health care professionals, patient or consumer (Abdullah *et al.*, 2004). Medication error issues are often related to the medication safety and become the major concern in worldwide. Many studies showed that medication errors are more common and significantly contributed in building the medication safety system (James *et al.*, 2009). The previous study in British reported that in 35 community pharmacies prospective study, it was found that there were 22 near misses and four errors among 10.000 items dispensed (Ashcroft *et al.*, 2005). Many factors are related to the medication safety system development, some of them are related to the sociotechnical factors. These sociotechnical factors are; relationship between pharmacist-customer, relationship between pharmacist-other health professionals, demands on the pharmacist, and management-governance factors (Phipps *et al.*, 2009). This article was aimed to understand the role of pharmacist in preventing the medication errors and the role of pharmacist in developing the medication safety.

**Method.** The review of some free full text English articles which was found in the PubMed for the last five years with the key words of: pharmacist role and/or preventing and/or medication error and /or medication safety was done.

**Results.** There were 2 articles found with the keywords of pharmacist role, preventing, medication error (Phipps, *et al.*, 2009, Volmer *et al.*, 2012) and two more articles were found with the keywords of pharmacist role, preventing, medication error, medication safety (Al-Dhawaliie, 2011, Klopotoska *et al.*, 2010). The study of Phipps *et al* explained about the sociotechnical context of medication safety in community pharmacy, the study of Volmer *et al* (2012) explained about the use of generic instrument to document the prescription problem. The study of Dhawaliie (2011) showed the role of pharmacists' intervention in to detect the prescribing errors and the study of and the study of Klopotoska *et al.*,(2010) showed the hospital pharmacists' participation in reducing the prescribing errors and preventable adverse drug events in ICU settings (Al-Dhawaliie, 2011, Klopotoska, *et al.*, 2010, Phipps *et al.*, 2009, Volmer, *et al.*, 2012).

**Discussion.** Pharmacist in the community and hospital has a very important role, especially in detecting, preventing and solving the prescription problems. Prescription problems could result prescription errors which is one of the type of medication errors. In some cases, the medication errors can lead to the unpreventable adverse events. Adverse event is an injury due to the medication use. In the study of Hickner *et al.*, there were around 70 % of medication errors, 27% of adverse event and 2.4% of both medication error and adverse events in the application of a medication error and adverse events reporting system (Hickner *et al.*, 2010). This description showed that not all of the medication errors were ended with adverse event; there was small percentage of medication errors which was ended on adverse events. Regarding to these numbers, we should realize that medication errors were highly contributed to the medication safety and it has been become the pharmacists' responsibility to promote the rational drug use, which are: maximize the therapeutic effect, minimize the risk or harm and minimize the cost. Adverse drug events and medication errors are very related with the high cost of treatment and the pharmacists' intervention in preventing the medication errors and adverse events could save the €26-40 (Klopotoska, *et al.*, 2010).

Building the medication safety system need multidisciplinary collaboration, especially among the health professionals and the management system. The first sociotechnical role of pharmacists in building the medication safety system are; development of relationship with prescriber and the customer especially in conducting the administration, pharmaceutical and clinical screening of the prescription. Pharmacist should develop the patients' trust to him/her, this trust will be useful during the assessment process, giving the safety issues of medication and monitoring the treatment. The second roles of the pharmacists are demand on the pharmacists. As we know that in the perspective of hospital and community pharmacy, medications showed the major contributions in

the finance and budgetary. Thus the issues of profitability vs safety, following the law vs meeting the demands are need pharmacists' wisdom and responsibility to be applied. The last role of pharmacists in building the medication safety are developing and arranging the culture, quality control, quality assurance and designing the workflow to ensure the preventive of medication errors and adverse event (Phipps, *et al.*, 2009).

Prescribing errors was known as common cause of preventable medication errors and adverse events in primary settings. In the setting of building the generic protocol to document the prescription errors, the study of Volmer *et al.*, concluded that the electronic prescription could reduce the prescription errors and the feasibility of the pharmacists' access to the patient's medical record could increase the possible detection of adverse drug events and drug-drug interaction (Volmer, *et al.*, 2012). The other study by Dhawailie *et al.* (2011), showed that pharmacists' intervention in detecting the medication errors could protect the patients from the impact of medication errors. There were 7.1% prescribing errors were detected among 1580 medication orders. The most recorded prescribing errors were on the medication strength errors and medication frequency errors. Many factors related to the prescribing errors, which are; ineffective communication among the health care professionals, work load, stress, less experience and lack of training for medical students (Tully *et al.*, 2009). These factors could be overcome by routine program of patients prescriptions monitoring which should be done by pharmacists (Classen & Metzger, 2003). By using the electronic medical records and permitting the pharmacists to access patients' medical record could decrease the medication errors and adverse events which mean that it will help the development of medication safety system.

Intensive Care Unit (ICU) ward is one of the wards with the most possible medication errors occurred. The number of medication errors is quite high due to the polypharmacy, high risk drug and also high frequency change of treatment (Mansour *et al.*, 2012). The study of Klopotoska *et al* (2010) showed that when the pharmacist could review the patients prescription in ICU then made some recommendations due to the potential prescribing errors in the ICU wards, the incidence of prescribing errors was significantly lower than the baseline period. The most frequent recommendations from the pharmacists were start the new drug, change the drug dosing and change the dosing frequency. Not only reduce the prescribing errors, the pharmacists' interventions also could save the medication cost due to the adverse event.

Currently, not all of the pharmacists who work in community and hospital realize that their role is very important in preventing the prescribing error and adverse event. They can start from reviewing the medication prescription, giving intervention to the avoid the potential prescribing errors and adverse event, building the culture and system of quality control and quality assurance of pharmaceutical care and starting the reporting system of medication errors and adverse events. By starting the above roles, pharmacist can participate in the development of medication safety system. If patients feel safe during their treatment, they will not use the law system to make judgment of their treatment failure.


**Conclusion.** Pharmacists can start some activities to prevent the medication errors and to participate in the development of medication safety system, such as: to review prescription, to make intervention to the prescription, to build the quality control and quality assurance system for pharmaceutical care and to start the report system of medication errors and adverse event.




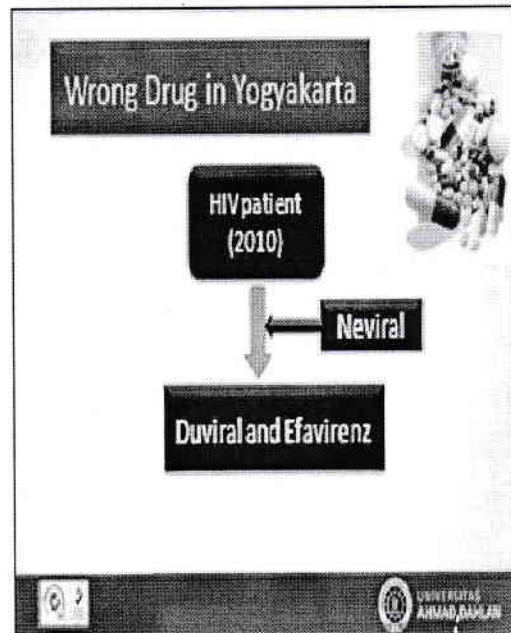
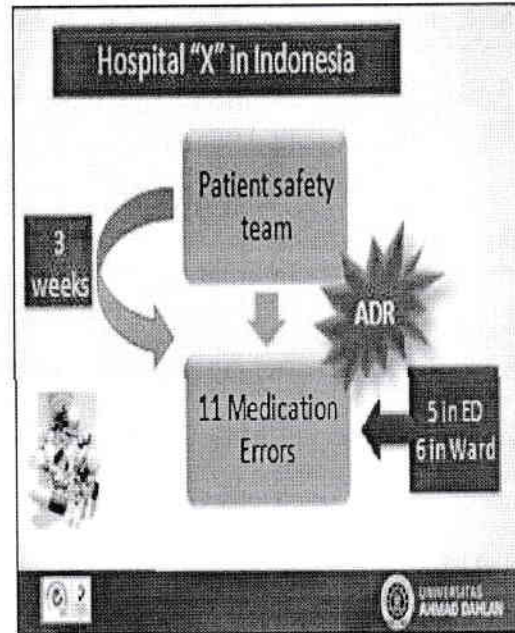
## References

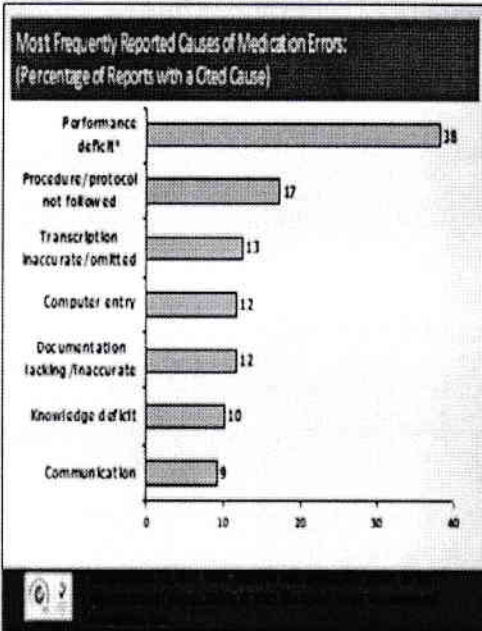
- Abdullah, D. C., Ibrahim, N. S., & Ibrahim, M. I. (2004). Medication errors among geriatrics at the outpatient pharmacy in a teaching hospital in kelantan. *Malays. J. Med. Sci.* 11, 52-58.
- Al-Dhawailie, A. A. (2011). Inpatient prescribing errors and pharmacist intervention at a teaching hospital in Saudi Arabia. *Saudi. Pharm. J.* 19, 193-196, doi:10.1016/j.jsps.2011.03.001 [doi];SPJ69 [pii].



- Ashcroft, D. M., Quinlan, P., & Blenkinsopp, A. (2005). Prospective study of the incidence, nature and causes of dispensing errors in community pharmacies. *Pharmacoepidemiol. Drug Saf* 14, 327-332, doi:10.1002/pds.1012 [doi].
- Classen, D. C. & Metzger, J. (2003). Improving medication safety: the measurement conundrum and where to start. *Int. J. Qual. Health Care* 15 Suppl 1, i41-i47.
- Hickner, J., Zafar, A., Kuo, G. M., Fagnan, L. J., Forjuoh, S. N., Knox, L. M., Lynch, J. T., Stevens, B. K., Pace, W. D., Hamlin, B. N., Scherer, H., Hudson, B. L., Oppenheimer, C. C., & Tierney, W. M. (2010). Field test results of a new ambulatory care Medication Error and Adverse Drug Event Reporting System--MEADERS. *Ann. Fam. Med.* 8, 517-525, doi:8/6/517 [pii];10.1370/afm.1169 [doi].
- James, K. L., Barlow, D., McCartney, R., Hiom, S., Roberts, D., & Whittlesea, C. (2009). Incidence, type and causes of dispensing errors: a review of the literature. *Int. J. Pharm. Pract.* 17, 9-30.
- Klopotowska, J. E., Kuiper, R., van Kan, H. J., de Pont, A. C., Dijkgraaf, M. G., Lie, A. H., Vroom, M. B., & Smorenburg, S. M. (2010). On-ward participation of a hospital pharmacist in a Dutch intensive care unit reduces prescribing errors and related patient harm: an intervention study. *Crit Care* 14, R174, doi:cc9278 [pii];10.1186/cc9278 [doi].
- Mansour, M., James, V., & Edgley, A. (2012). Investigating the safety of medication administration in adult critical care settings. *Nurs. Crit Care* 17, 189-197, doi:10.1111/j.1478-5153.2012.00500.x [doi].
- Phipps, D. L., Noyce, P. R., Parker, D., & Ashcroft, D. M. (2009). Medication safety in community pharmacy: a qualitative study of the sociotechnical context. *BMC. Health Serv. Res.* 9, 158, doi:1472-6963-9-158 [pii];10.1186/1472-6963-9-158 [doi].
- Tully, M. P., Ashcroft, D. M., Dornan, T., Lewis, P. J., Taylor, D., & Wass, V. (2009). The causes of and factors associated with prescribing errors in hospital inpatients: a systematic review. *Drug Saf* 32, 819-836, doi:3 [pii];10.2165/11316560-000000000-00000 [doi].
- Volmer, D., Haavik, S., & Ekedahl, A. (2012). Use of a generic protocol in documentation of prescription errors in Estonia, Norway and Sweden. *Pharm. Pract. (Granada.)* 10, 72-77.


**UNIVERSITAS AHMAD DAHLAN**  
**Current Pharmacist' Role in Preventing Medication Errors to Develop the Medication Safety System**  
 Dyah A Perwitasari  
 Faculty of Pharmacy, University of Ahmad Dahlan Yogyakarta  
 Presented in: International Conference of Restorative Justice



## Pharmacist?

- Culture of Safety
  - Non-punitive systems
  - Multidisciplinary error prevention
    - Involve parents and families
  - Executive walk rounds
  - Medication Safety Initiative
    - Strong, clear, visible attention to safety
- Avoid fatigue
- Minimize distractions
- Independent double checks
  - 2<sup>nd</sup> checker will detect ~ 90% of errors made by first checker
- HIT: Alert system, electronic prescribing, electronic label system

## APOTEKER

- TANGGUNGJAWAB PERDATA APOTEKER TERHADAP PASIEN SELAKU KONSUMEN AKIBAT KESALAHAN PEMBERIAN OBAT DITINJAU DARI :
  1. UNDANG-UNDANG NOMOR 36 TAHUN 2009 TENTANG KESEHATAN
  2. UNDANG-UNDANG NOMOR 8 TAHUN 1999 TENTANG PERLINDUNGAN KONSUMEN

