

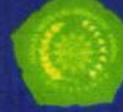
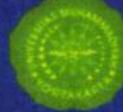


The Proceeding of 3<sup>rd</sup> International Nursing Conference

# HEALTH AND THE IMPACT OF GLOBAL WARMING

Sheraton Mustika Hotel, Yogyakarta Indonesia  
November 17 - 19, 2009

UNIVERSITAS GADJAH MADA, YOGYAKARTA, INDONESIA  
PRABOROMARAJCHANOK INSTITUTE MINISTRY OF PUBLIC HEALTH, THAILAND  
EDITH COWAN UNIVERSITY, AUSTRALIA  
THE ASSOCIATION OF INDONESIAN NURSE EDUCATION CENTER, INDONESIA



Website: [www.keperawatan.ugm.ac.id](http://www.keperawatan.ugm.ac.id) • Email: [ainec\\_globalhealth@yahoo.co.id](mailto:ainec_globalhealth@yahoo.co.id), [secretary\\_ainec@yahoo.co.id](mailto:secretary_ainec@yahoo.co.id)

## *Greeting message*

Dear Delegates and Colleagues,

On behalf of the International Nursing Conference, I am proudly inviting you to join the 3<sup>rd</sup> International Nursing Conference (INC) which has theme "Health and the Impact of Global Warming". This prestigious event is endorsed collaboratively between the Association of Indonesian Nurse Education Centers (AINEC), Edith Cowan University (EDU), Praboromarajchanok Institute Thailand (PBI) that is organized by School of Nursing, Faculty of Medicine, Universitas Gadjah Mada starting from 17 – 19 November 2009 at Sheraton Mustika Hotel Yogyakarta, Indonesia.

With theme of "Health and the Impact of Global Warming", the conference will be an excellent event by inviting some researchers to share and discuss several issues that relates to the selected topics by considering the aspect of trans-cultural perspective in many fields of study, educators, practitioners, experts and also students from all over the world.

We would be very delighted to see you in Yogyakarta and we could confidently assure you that the conference would be the one of our unforgettable and everlasting memories, as we have arranged some exciting social programs for delegates as well and accompanying them to see the beauty of Yogyakarta heritage.

Welcome participants!

Kindly regards,

Prof. Elly Nurachmah, DNSc., R.N.  
President of 3<sup>rd</sup> International Nursing Conference

## Participant of Presentation

3rd International Nursing Conference: Health and the Impact of Global Warming

NO	NAME	PLACE	TITLE
1	Achara Janpet, Peamsook Sombatsook, Anuchit Clungmun,	BCN YALA	<i>The Desirable Characteristics of Graduate Nurse in Southern Provinces, Thailand</i>
2	Amornrat Akkarasetsakul RN et. al	Thailand	<i>Heath behavior of health club members in Wang Sammoh district, Udon Thani Province 2007</i>
3	Angkana Montong	BCN RATCHABURI	<i>Relationship between health beliefs, self-Efficacy, hope and psychological self-care behaviors of patients with depressive disorder</i>
4	Faustino Jerome Babate, RN, MBA <sup>1</sup> , Elsi Dwi Hapsari, RN, MSN <sup>2</sup> , Vito de Raya, RN, MPH <sup>3</sup> , Norhayani Amin, RN, MSN (co-Presenter) <sup>4</sup> , Maela Babate, RN, MAN <sup>5</sup>		<i>Ethical issues in Nursing Research : Perception in the ASEAN Region</i>
5	Atcharawadee Sriyasak <sup>*</sup> , MSc PH,RN, et al	Prachomkloa Nursing College	<i>A construction of using computer assisted instruction (cai) on the subject of empowerment of self-care for first- year nursing students</i>
6	Awirut Singkun	SCPH YALA	<i>The Opinion of Second Year Students of Boromarajonani College of Nursing, Yala on Stupid False Choice in Examination</i>
7	Benjawan Sriyotin, Ph.D, RN.	BCN Ratchaburi	<i>Perceptions of nursing towards learning and teaching with laws and regulations associated with nursing profession</i>
8	Boonsong Supradith, RN	Thailand	<i>The Comparative Study of Effects of Husband Preparation for Spousal Support on Husband's and Wife's Satisfaction and Pain Coping Behavior During Labour and Apgar Score between First-time mother and the Time after Mother</i>

NO	NAME	PLACE	TITLE
9	Boonsurb Sosome, PhD. <sup>1)</sup> Jeerawan Ukakimaparn <sup>3)</sup> Supamas Adikarnkul MS.	BCN Praputhabat	<i>The Development Process to Improve Learning of Nursing Research for Bachelor Nursing Students</i>
10	Boossara Srisupat, Asst. Prof. Dr. Ampornpan Teranute	Thailand	<i>Factors Related with Pre-Discharge's Caregiver Readiness of care for Elderly with Dependency</i>
11	Chalee Kanchanarat	BCN Chaing Mai	<i>The Study of Courseware Patterns production with Emphasis on Student Center Learning</i>
12	<u>Chantira Chiaranai, RN, PhD*</u> <u>Rujiruth Maneesri, RN, MSN*</u> , <u>Saranya Churalee, RN, MSN*</u> , <u>Sukhumal Sanpaung, RN, MSN*</u> , <u>Auranuch Pradubthong, RN, MSN*</u> , <u>Worranart Promsuan, RN, MSN</u>	BCN Surin	<i>Nursing care behaviors in preventing ventilator associated Pneumonia of nursing students, Borommarajonani College of Nursing, Surin</i>
13	Chart Thaicharoen RN., MsN	Srimahasarakham NC	<i>The Participation of Family in Performance of Family and Community Nursing 1 for Bachelor Program in Nursing Science Srimahasarakham Nursing College</i>
14	Chutima Malai	BCN Ratchaburi	<i>Factors influencing organizational citizenship behaviors of nursing instructors in Colleges of Nursing, Ministry of Public Health</i>
15	Chutima Panyapinijnugoon Ed.D. RN., Sukjai Charoensuk, Ph.D. RN., Penphun Kajohnsilp Ph.D. RN.	BCN Chonburi	<i>Factors related to the organizational commitment of nursing instructors in the Nursing Colleges under jurisdiction of Praboromarajchanok Institute, the Ministry of Public Health</i>
16	Donnapa Hongthong, M.Sc., MN* & Colleagues	BCN Phayao	<i>Knowledge, Perception and Prevention Behavior regarding the Chikungunya Fever among Nursing Students at Boromarajonani College of Nursing, Phayao</i>
17	Doungjai Plianbumroong* Achara Musikawan*	BCN Yala	<i>The Perception of Patients Rights and Actually Received on Patient Rights When Bedside Teaching</i>
18	Mrs. Duangkhae Pitaksin, MNS, RN.*, Mrs. Pitchawee Sinsawad, MNS, RN.*	BCN RATCHABURI	<i>Effect of E-Learning, Nursing Care of the Patient with Fracture Femur with Traction on Learning Achievement of Nursing Students at Boromarajonani College of Nursing, Ratchaburi</i>
19	Duddeorn Khewleorng *, RN, M.P.H. and	BCN Uttaradit	<i>The Effect of Brief Intervention as a Means of Alcohol Drinking Reduction among the technical students of Uttadit College, Thailand</i>

NO	NAME	PLACE	TITLE
20	Mrs. Jurairat Watcharaach, Patcharapa Kanchanaudom MNS, Suppakorn Wankrathok BNS.	Thailand	<i>Health Promoting Behaviors of the Child Care Providers for Preschool Children in the Child Development Center</i>
21	Jarunee Chardpoom, Phimphan Ratanakomol	BCN Chainat	<i>The Study of Teachers' Behavior in Boromarajonani College of Nursing; Chainat Following Through Teacher Disciplines</i>
22	Jarunee Intharit <sup>1</sup> , M.Sc. RN., Nualjan Matayaputorn <sup>1</sup> , Ed.D., M.Ed. RN. Pattarasuda Hamkumpai <sup>1</sup> M.Sc. RN., Phutthisak Chantratip <sup>1</sup> , RN. 1	Thailand	<i>The Development of Student-Centered Classroom Learning-Teaching Management on " The Nursing Care of Patients withdrawal Depression Suicide Behavior</i>
23	JARUWAN KANSRI	BCN Chainat	<i>Effectiveness of Cognitive Behavioral Group Therapy on Depression among AIDS Patients</i>
24	Jiriya Intana, Nattaya Wongyara, Rungtip Chaiyoyingyong, Kulaya Srimahan, Nujaree Hakom, Penjamas Khumtana	BCN RATCHABURI	<i>A study of achievement in teaching management integrated humanized concept on the practicum in Primary Medical Care</i>
25	Julaluck chumchong, M.N.S., RN.	Srimahasarakham NC	<i>Stress and Problem Solving Style of Students Nurse From South of Thailand in Srimahasarakham Nursing College</i>
26	Jureerat Kijssomporn, PhD, Richard H. Steeves, PhD.,	PBRI	<i>Surviving in the marginal world : Health of Thai immigrants in the district of Columbia</i>
27	Nutthita Petchprapai, Kainapa Kaewchanta, Malinee Youchaiyen & Kasorn Suwittayasiri	BCN Bangkok	<i>Relationship between knowledge, attitude and sexual risk behavior among high school students in Bangkok</i>
28	MS. Kanchana Panyathorn, MS,RN, MS. Human ecology		<i>Life Style of Diabetes Patients among the controlled and Uncontrolled Blood glucose group</i>
29	Kannika Runagdej (MPH, Dr. P.H.)	SCPH YALA	<i>A Study of Ground-Level Ozone Trend in Bangkok area, Thailand</i>
30	Kanokporn Oumpram	Thailand	<i>The evaluation research of local-health insurance fund implementation in Phetchaburi Province</i>
31	Kanokwan Silapakumpisate PhD , RN <sup>1</sup> ; Waranee sumrit MdN , RN <sup>1</sup>	Thailand	<i>Development of student-focused lively learning center model</i>

NO	NAME	PLACE	TITLE
32	Kansiri Juncharoen, M.A <sup>1</sup> , Natchaya Supeepree, M.Ed., RN <sup>2</sup> , Panatsaya Wannawilai, M.Ed., RN <sup>3</sup> , Krittaporn Sirisom, MSc., RN <sup>4</sup>	Thailand	<i>Needs of Caring Perceived by the Relative of Critically Ill Patients Admittede in Songkhla Hospital</i>
33	Kitsanaporn Tipkanjanarayka, Sumlee Saleekul	BCN Bangkok	<i>The effects of behavior promotion program to prevent among high risk</i>
34	Kleebkaew Janhong	BCN Bangkok	<i>Prediction of neonatal blood sugar level from mother blood sugar level at Banpong Hospital, Ratchaburi Province, Thailand</i>
35	Kunthida Kulprateepunya, MEd		
36	<u>Kwanta Boonvas</u> , Ed.D, RN	BCN Nopparat Vajira	<i>Relationship between stress, psychological well-being, and quality of life of nursing students in Boromarajonani College of Nursing, Nopparat Vajira (BCNNV)</i>
37	Laiad Jamjan RN.,Ed.D	BCN Nopparat Vajira	<i>The Course Designing for Development of Nursing Innovation</i>
38	Methinee Jantiya (M.N.S.)	BCN Saraburi	<i>Effect of Empowerment Program by Using Applied Pulmonary Rehabilitation Program to Health Behavior's Patients living with Chronic Obstructive Pulmonary Disease</i>
39	<u>Monthana Hemchayat</u> <sup>1</sup> , PhD, RN, <u>Arunaya Boontum</u> <sup>2</sup> , MSN, RN, <u>Jariyaporn Wannachot</u> <sup>3</sup> , MSN, RN	Phrapokklao NC	<i>The Differences in Problem Behaviors and Coping Strategies among Adolescent Students in schools located in Rural and Urban Areas of Chanthaburi, Thailand</i>
40	Naraumon Eakthamasut, M.Nc., RN, Kruamas Petchu, M. Ed., RN, Amara Pinyo, M.Sc., RN	Thailand	<i>Knowledge, Attitude and Practice towards Children's Rights of Preschool's Caregivers at Child Care Center in Muang</i>
41	Naiyanan Jitrapun, Mrs. Sirapat Sothiyapai 2	Thailand	<i>Perception of the Student on Instructor's Caring Behavior</i>
42	<u>Naovarat Sukanalam</u> <sup>1</sup> RN, M.N.S., <u>Narumon Anekwit</u> <sup>2</sup> RN, M.N.S., Ph.D., <u>Bhanwasa Juntasin</u> <sup>1</sup> RN, M.N.S.	Thailand	<i>Cost analysis for producing and training health care professional of Srimahasarakham Nursing College in academic year 2007</i>
43	Naruemol Singha-Dong, MSc (Com. Med), MS (Nursing), Ph.D., RN	BCN Sappasithiprasong	<i>Prevention of Tuberculosis (TB) among Khmer Minority of Thailand</i>

NO	NAME	PLACE	TITLE
44	Natawan Khumsaen <sup>1</sup> , PhD, RN		<i>Gender differences in condom use self-efficacy among Thai adolescents</i>
45	Nisa Krutchan* M.S.N.	BCN Sawanpracharak	<i>Teaching to student nurse's pain management behavior in postoperative patients</i>
46	Jarunee Warahut <sup>1</sup> M.SN.,RN, Oratai Keawmahakan <sup>2</sup> ,M.Ed	Thailand	<i>An Evaluation of Job Employment Rate of Graduated from Bachelor of Nursing Science Program and Diploma in Nursing Science Program, Academic Year 2006, Boromarajonani College of Nursing Songkhla</i>
47	Nonglak Chetpakdeechit , RN., M.Ed., Sukjai Charoensuk, RN., Ph.D., Praparathawekeartrakoon , RN., M.SN., Ubol Suttineam , RN., M.SN.	BCN, Chon Buri	<i>The Study of Health Education for Health Promotion Model for People in Chon Buri Province</i>
48	Paiboon Chaosuansreecharoen <sup>1</sup> and Kannika Ruangdej <sup>1</sup>	SCPH YALA	<i>Food Culture of Local Cuisine in the Three Deep Southern Provinces of Thailand</i>
49	Panatsaya Wannawilai , M.Ed., RN <sup>1</sup> ; Orathai Keawmahakan, M.Ed.,RN <sup>2</sup> ; Sukkarin Suwanwaha, B.Ed. <sup>3</sup>	Thailand	<i>The Follow-up Study of the Nurse Graduated from Boromarajonani College of Nursing Songkhla, Academic Year 2006</i>
50	Ms.Panida Rattanaprom (BNS.,MNS.), Ms.Jatupron Tantanokit (BNS.,MNS.)	BCN Nukhon Si Thammarat	<i>Effectiveness of Normal Birth Giving Skills Preparation of Bachelor Nurse Student, Boromarajonani Nakhon Si Thammarat</i>
51	Pannatorn Chutchawarut (PhD.Education)	BCN Phayao	<i>Factors related with game addiction among teenagers</i>
52	Paranee Thapsongsang, RN; Waranee Sumrit RN.	Thailand	<i>Factor of relationship an preventing behaviors state of menopause woman in Ampar Muang Trang, Trang Province</i>
53	Parichat Utaipan M.S.Pharm, Chainarong Chootong M.S.Pharm, Anchalee Pongkaset M.S.Science., Khutjit Pongrattanaman Ph.D.Dent., Suthon Manasuwan M.S.Social	Thailand	<i>The Study of situation and correlation factors on health care provision of government under the violence crisis in Southern Thai-Border province</i>
54	Pantip Poorananon, (M.N.S.) and Tassanee Krirkgulthorn (D.N.S)	Thailand	<i>Evidence-Based Nursing Ability and Attitudes in Nursing Students</i>

NO	NAME	PLACE	TITLE
55	Pattamamas Chotibun, <sup>1</sup> M.S.N.,M.Ed.,RN, Tharinee Nontaput, <sup>2</sup> M.S.(Pharmacology), RN.; Amorn Watanatheerangoon, <sup>3</sup> M.Ed.	Thailand	<i>Proactive Habits among Nursing Students in Clinical Practice of Nursing Administration Course: Songkhla College of Nursing</i>
56	Payom Thin-Oun, MSN, RN., Saowapa Dedkhard, PhD, RN.Pratumpun Manokunanan, MS, RN., Nongluk Promtingkarn, MSN, RN	BCN Nakhon Lampang	<i>Senses of Belonging and Protection Cultivated Community Strengths and Participation among Villagers in Developing and Sustainableng their Community</i>
57	Pennapa Wichakool <sup>1</sup> , MSN, RN., Arunya Boontum <sup>2</sup> , MSN, RN., Monthana Hemchayat <sup>3</sup> PhD, RN	Phrapokklao NC	<i>Effects of a Program Enhancing Problem Solving Skills on Depression and self-Efficacy in Early Adolescents, Thailand</i>
58	Phanphilai Sutthana RN,MNS	BCN Uttaradit	<i>The Invented of Anti lice Herbal Shampoo for Elementary School Students</i>
59	Panatsaya Wannawilai , M.Ed., RN <sup>1</sup> ; Orathai Keawmahakan, M.Ed.,RN <sup>2</sup> ; Sukkarin Suwanwaha, B.Ed. <sup>3</sup>	Thailand	<i>The Follow up study of the graduated nursis from Boromarajonani College</i>
60	Pinnarat Gadudom, PhD, RN <sup>1</sup> Lalana Pratum, MSN, RN <sup>2</sup> Jariyaporn Wannachot, MSN, RN <sup>3</sup> Monthana Hemchayat, PhD, RN <sup>4</sup>	Phrapokklao NC	<i>Effects of a Short-term Program of Adolescent Sex Education Implemented by Nursing Instructors of Nursing College in Chanthaburi, Thailand</i>
61	Pissamorn Dechduang RN.,M.N.S	Prachomkloa Nursing College	<i>Health Status of Urban People in Petchaburi province</i>
62	Pitchawee Sinsawad*, Duangkhae Pitaksin	BCN RATCHABURI	<i>Development of sustainable health promoting behaviors through participation of Boromarajonani Faculty Communities at Nursing College Ratchaburi affiliated with Mahidol University</i>
63	Poungpen Phuaksawat, <sup>1</sup> M.S.N., RN; Saowapa Ekadisuk <sup>1</sup> , M.S.N., RN;	Thailand	<i>The Association of health status perception and health behaviors of the patient with chronic renal failure</i>

NO	NAME	PLACE	TITLE
64	Prapaipis Singhasem <sup>1</sup> , RN, M.N.S., Sopit Suwanvela <sup>2</sup> , RN, M.N.S., Tippawan Boonyaporn <sup>3</sup> , RN, M.N.S	Thailand	<i>The effect of integration of higher nursing education institute mission and national children's days project on desirable graduate characteristic , Boromarajonani nursing college</i>
65	Pyrush Bunthose, M.Sc.* and Rungpesh Bunthose, M.Ed.*	Thailand	<i>Relationship between Job Characteristic and Work Experience and Organizational Commitment of Dental Nurses in central region Thailand</i>
66	Rungrudee Usaha <sup>1</sup> RN., Panjai Tubteiang,RN <sup>2</sup> ., Tippawan Boonyaporn <sup>3</sup> ,RN	Thailand	<i>Labor pain relief with Thai traditional messaging Instrument</i>
67	Sa-ard Mungsin, MS, RN <sup>1</sup> , Puntipa Keawmataya, MS, RN <sup>2</sup> , Wanpen Petchkrai, BSc, RN <sup>3</sup>	Thailand	<i>Sufficient funeral rites : from capitalism to economy</i>
68	Sakorn Intolo	Srimahasarakham NC	<i>Participation network on elderly care in Mahasarakham Province in the Northeast of Thailand</i>
69	Sarinthorn Mungkamane, M.N.S, Piyawatchara Pramalnrut, M.B.A.	BCN Suphanburi	<i>Effect of Self-Efficacy Enhancing Program in self-Care on Health Promoting Behaviors of First-Time Adolescent Pregnant Women</i>
70	Sasidhorn Chidnayee RN, MNS*	BCN Uttaradit	<i>Team-Based Learning on Satisfaction with Team and Educational Outcome in an Undergraduate Nursing Course</i>
71	Sasidhorn Chidnayee RN, MNS*	BCN Phayao	<i>Emotional Stability and Adversity Quotient among Students at Boromarajonani College of Nursing, Phayao</i>
72	Sirilak Dejphet <sup>1</sup> , Nopparat Muanmee <sup>1</sup> , Utsanee Tepvorachai, Ph.D. <sup>2</sup> , Suntaree Pinyomit, M.N.S. <sup>3</sup>	BCN Nonthaburi	<i>Global Warming Education Effect on Nursing Students at Boromarajonani College of Nursing, Changwat Nonthaburi</i>
73	Siriporn Kruttakart, M.N.S.*, Yuppadee somburanasin,M.N.S.*, Masarin Sukolpuk, M.N.S.*	BCN Nonthaburi	<i>Nursing Competency of practical nursing of the graduates granted Bachelor of Nursing Science from Boromarajonani College of Nursing , Chang Wat Nonthaburi: Conversion Program</i>
74	Sitanan Srijaiwong, RN, MNS1, Jiraporn Wongyai, RN, MNS <sup>1</sup>	BCN Uttaradit	<i>Stress and Coping Behavior in High Risk Pregnant Women</i>

NO	NAME	PLACE	TITLE
75	Somtakul Rasiri, B.Sc., B.P.H., M.Sc., Ph.D. <sup>1</sup> , Chaiwut Thanaruk, B.Sc., M.Ed. <sup>2</sup>	PHC Phisanulok	<i>Effects of energy saving activities and measures in Sirindhorn College of Public Health, Phitsanulok Province, Thailand</i>
76	Sopit suwanvela <sup>1</sup> , M.N.S., RN., Benjawan chuaykaew <sup>2</sup> , M.N.S., RN	Thailand	<i>The dietary control and exercise model in obese school children</i>
77	Sopit Suwanvela M.N.S., RN, Jeraporn Choowong MdN.,	Thailand	<i>Parent's health promotion behaviors and preschool children's health at Trang municipality child development center in trang province</i>
78	Supattra Phumphuag, MNS, RN., Soontaree Khachat, MNS, RN	Thailand	<i>Students' Satisfaction on Provided Welfare Services</i>
79	Srisuda Eklakkanarat (MSN.) and Sriwatana Pandee (MSN.)	BCN Sawanpracharak	<i>Effects of educational program on knowledge and behavior prevention of Hand-Foot-and-Mouth disease of nannies working in child development centre, Thailand</i>
80	Mrs Suchada Intarakumhang Na Rachasima	Sawanpracharak	<i>Variables Affecting Learning Achievement of Nursing Students in Boromarajonani College of Nursing, Swanpracharak Nakhonsawan</i>
81	Porntipa Taksin <sup>1</sup> , MNS, RN., Sukjai Charoensuk <sup>2</sup> , PhD, RN., Ubol Jibsamanbool <sup>3</sup> , MNS, RN	BCN Chonburi	<i>The factors related to nursing license examination for the first class of nursing profession and midwifery registration of graduated nurses of Boromarajonani College of Nursing, Chon Buri</i>
82	Supitra Selavattanakul <sup>1</sup> , Kanitha Virattanaphanu <sup>2</sup> , Sriubon Inphan <sup>1</sup> , Chachanicha Paengsup <sup>2</sup>	Thailand	<i>Leadership of Nursing Students, Boromarajonani College of Nursing, Surin</i>
83	Supaporn Voraroon, M.N.S. , Akom Phosuwan, M.S. Umakorn Jaiyagyeun <sup>1</sup> , M.N.S., Pornpoi Bunyasit <sup>2</sup> , M.P.H.	BCN Suphanburi	<i>Predictor of Exercise Behavior among Health Volunteers in Tambon Sanamchai, Muang District, Suphanburi Province Thailand</i>
84	Suthisa Jaroensin 1, RN., M.S.N, Nonglak Lengnoi 2, RN., M.S.N., Supaporn Wannasuntad <sup>3</sup> , RN., Ph.D.	BCN Songkla	<i>Caring : Meaning and behaviors from perspective of nurses and clients</i>

NO	NAME	PLACE	TITLE
85	Supimon Khorphon, Jintaweepon pankeaw, Umporn sarobol, Somporn Sittisongkram, Waruneeinonkarn2 Sayan chaisrisawat, Sumalee chaisrisawat, Prachab norsak3	BCN Chiang Mai	<i>Participatory Action Research in Prevention and Solving Alcohol Drinking Problems in the Community of Chiang Mai Province Thailand</i>
86	<b>Suppaluk Thanirat, M.N.S.<sup>1</sup>, Kamolrat Turner, Ph.D.<sup>1</sup>, Sujira Wichianrat, M.N.S.<sup>1</sup></b>	BCN Nonthaburi	<i>A study of nursing competency and satisfaction on the competency of graduates in year 2005, Boromarajonani College of Nursing, Chang Wat Nonthaburi</i>
87	<b>Suparat Jamjang<sup>1</sup>, Wirada Atthamaethakul<sup>1</sup>, Amporn Janda<sup>2</sup></b>	BCN RATCHABURI	<i>A Development of Discharge Planning Model for Diabetic Foot Patients at Rachaburi Hospital</i>
88	Surattana Tossanoot, M.S., R.N.	BCN Nopparat Vajira	<i>The Relationship between Learning Style and Grade Point average of the Fourth Year Nursing Students in Nursing College, Ministry of Public Health</i>
89	Suree Khantaruksawong R.N., Ed.D	BCN Nopparat Vajira	<i>Attitude towards Evidence-Based Learning (EBL) of Nursing students</i>
90	<b>Mrs. Suwimon Maneechote, MSc., RN., Mrs. Pattama Kanyuk, Med., RN</b>		<i>The professional ethics behavior in Baromarajonani nursing colleges</i>
91	Tanatcha Paipayob, MSN.	BCN Sawanpracharak	<i>Effectiveness of and satisfaction with using computer program to assess child development</i>
92	<b>Glomjai, T., MNS, RN., Duangchun, J., MS, RN., Chiddee, J., ME, RN.</b>	Prachomkloa Nursing College	<i>The study of leadership of 4th nursing students before and after finishing of nursing administrator's roles practice</i>
93	Mrs. Tharin Sukanun	SCPH Chonburi	<i>Villagers' perceptions towards self-sufficiency economic community : A case study of Ban Nong Born, Chonburi Province, Thailand</i>
94	<b>Thanyawalai Boonprasithi<sup>1</sup>, RN, ME; Paemika Kachayudtadech<sup>2</sup>, RN, BSN; Kanokorn Srisomphan<sup>1</sup>, RN, MNS</b>	Thailand	<i>Effectiveness of Active Learning Methods used in Maternal-Child and Midwifery 2 Subject for Students of Nursing</i>

NO	NAME	PLACE	TITLE
95	<u>Ket-In, V.</u> , MSN, RN ., <u>Keitmala, R.</u> , MS, RN., <u>Hongthong, K.</u> , MSN, RN., <u>Teinchaitut, C.</u> , MSN, RN., <u>Chinglek, W.</u> , MNS, RN	Prachomkloa Nursing College	<i>the study of leadership of 2nd nursing students (continuing program) before and after finishing of nursing administrator's roles practice</i>
96	<u>Vipavee Thongpriwan</u> , Ph.D, RN1 <u>Laiad Jamjan</u> , Ed.D, RN2	BCN Nopparat Vajira	<i>International learning experiences of global health and cultural immersion: lesson learned from Thai faculty and student nurses</i>
97	<u>Wannapa Pipattanawong</u> , <u>Jutharat Jongkae</u> , <u>Pimonpan Niamhom</u> , <u>Poonsap Lapchem</u>	BC Chiang Mai	<i>The Study of Anti Drug Model for Youth by Elderly in the Community</i>
98	<u>Wanwadee Neamsakul</u> RN, MNS, PhD	BCN Uttaradit	<i>Evaluation Research of the Adolescent Pregnancy Problem-solving Project: Region 17, Thailand</i>
99	<u>Wareewan Siriwanij</u> , RN., PhD	BCN Nakhon Ratchasima	<i>Preparing Nursing Students on Maternal-Child Nursing and Midwifery practicum 1 through Tutorial</i>
100	<u>Werapan Anantapong</u> <sup>1</sup> , BPH, MA, <u>Prapaporn</u> <u>Manorath</u> <sup>2</sup> , RN, MSc.	SCPH Phitsanulok	<i>Influencing factors for successful collaboration between Collage of Public Health and Community health care provider, on teaching and learning management practice: A case study of Sirindhorn College of Public Health, Pitsanulok , Thailand</i>
101	<u>Wiriya Phokhang-Just</u> , RN. PhD.	BCN Surat Thani	<i>A Development of Questionnaire Assessing Nutritional Knowledge, Attitude, and Practice of Thai Nursing Students</i>
102	<u>Atiya Sarakestrin</u> , <u>Wiriya Phokwang-Just</u> , <u>Amnouy Tantaratsrisakul</u>	BCN Surat Thani	<i>Nutritional knowledge, Attitude and Practice of Nursing Students at Boromarajonani College of Nursing, Surat - Thani</i>
103	<u>Woranart Promsuan</u>	BCN Surin	<i>The incorporation of Sufficiency Economy in Economics and Health System: Lesson Plan Development</i>
104	<u>Yoavadee Suwannaka</u> , PhD., RN #1	BCN Surin	<i>The Caring Innovations Through Thai Caritas Consortium</i>
105	<u>Chutima Cholpratin</u> , MNS., <u>Atcharobon</u> <u>Sangprasert</u> , MNS., <u>Pornwilai Klaichan</u> , MNS.	BCN Sawanpracharak	<i>Factors related to the result of Maternal-Child Nursing and Midwifery Science in the Thai Nursing Council's Examination for Registered the first class of Nursing and Midwifery Profession of Graduated Nursing students of Boromarajonani College of Nursing, Sawanpracharak Nakhonsawan</i>

NO	NAME	PLACE	TITLE
106	<u>Sakmongkon cheutong, Jeeraporn Cheuncham, Nayana Phulom, Patchaneeya Chiangta</u>	BCN Saraburi	<i>Effect of a Developed Public Consciousness Program to Nursing's Student Public Consciousness and Happiness at Borommarajjoni College of Nursing; Saraburi</i>
107	Supattra Phumphuang, MNS, RN., Soontaree Khachat, MNS, RN	BCN Suphanburi	<i>Students' Satisfaction on Provided Welfare Services in Borommarajonani College of Nursing, Suphanburi</i>
108	Suwalee Chookiarti, <sup>1</sup> M.A.; RN.; Surasak Puttewarnit, <sup>2</sup> M.S.N.,RN.; Napaporn Puttewarnit, <sup>3</sup> M.S.N.,RN.;	Thailand	<i>Cost Analysis for Professional Nurse Production and Health Personnel Development of Borommarajonani College of Nursing Songkhla, Thailand</i>
109	Elly Nurachmah, Prof. DNSc	Indonesia	<i>Leadership in Global Era</i>
110	A. Aziz Alimatul Hidayat	Indonesia	<i>The analysis of growth and development infants of Fishermen family in the City of Surabaya</i>
111	Agustinus Minarko	Indonesia	<i>The influence of bedside teaching toward the student's capability to perform the SOP (Standard Operating Procedures) of medical surgical nursing</i>
112	Ana Fauzi, Hema Malini	Indonesia	<i>The application of UP of surgery team in performing surgical procedure central operating room: hospital in Padang</i>
113	Anggorowati,	Indonesia	<i>The effect of counter pressure to sacrum on labour pain of active phase first stage in Primipara</i>
114	Christantie Effendy #2	Indonesia	<i>The correlation between quality of life and palliative care needs in cancer patients at DR. Sardjito Hospital Yogyakarta</i>
115	Christantie Effendy	Indonesia	<i>An overview on the compliance with therapy among Diabetes Mellitus (DM) patients in Yogyakarta</i>
116	Cicilia Wahyu Djajanti	Indonesia	<i>Effect of the root of Sereh (Cymbopogon nardus) infusion on urine production and blood potassium production in male white rats (Wistar Strain Rattus norvegicus) a laboratory experimental study</i>
117	Darma Suyasa, Swarjana, Kamaryati		<i>Lungs inspiration capacity of temple priest at sukawati village, Gianyar</i>
118	Deborah Kindy, PhD., RN	Indonesia	<i>Students professionalism and evidence-based practice</i>

NO	NAME	PLACE	TITLE
119	Dewi Prabawati		<i>Comparison of hydrotherapy treatment's for fever reduction in acutely ill adult patients</i>
120	Dr. Djenta Saha, SKp., MARS	Indonesia	<i>Improving health outcomes for low-income people living in rural villages in Central Kalimantan Indonesia</i>
121	Elsi Dwi Hapsari	Indonesia	<i>The awareness and identification of bacterial vaginosis among midwives and laboratory staffs in Wonosobo District</i>
122	Fatikhu Asmara	Indonesia	<i>Nurses experiences of conducting home visit to the lung TB sufferers in Rowosari Public Health Center Tembalang sub district Semarang City</i>
123	G. Sri Redjeki	Indonesia	<i>Abilities and satisfaction of mothers' towards health education about children stimulation development in toddler age in Kemirimuka Depok</i>
124	Guardani Yogisutanti #2	Indonesia	<i>The influence of training in patient handling (moving, transferring and repositioning) to reduce musculoskeletal symptoms in nurses of Immanuel Hospital in Bandung</i>
125	Guardani Yogisutanti & Nazarrudin	Indonesia	<i>Relation between diagnose workers perception about occupational health and safety and management commitment with the using of personal protective equipment in health care service DR. Zainoel Abidin Hospital Banda Aceh</i>
126	Hanna	Indonesia	<i>The effect of infant exercise on body weight of premature babies. A Quasi-Experimental research in Neonatal Intensive Care Unit (NICU) Ward at Surabaya International Hospital</i>
127	Hanny Rasni	Indonesia	<i>Poor family experience in the nutrient fulfillment for the children under five years old in Pelindu – Jember</i>
128	Hartiah Haroen	Indonesia	<i>Knowledge, attitude and practice of Universal Precaution of blood borne infection among health care workers in 8 Puskesmas in Sumedang</i>
129	Haryani, Christantie E, Fitri R	Indonesia	<i>The relationship between spiritual beliefs and emotional distress in Diabetes Mellitus type II at Yogyakarta</i>
130	Haryani, Roni Naning, Riris Andono Ahmad	Indonesia	<i>The risk factors related to Tuberculosis in children in Sleman, Yogyakarta Special Province</i>

NO	NAME	PLACE	TITLE
131	Intansari Nurjannah		Nurses' perception toward <i>The map of nursing diagnosis based on NANDA-I 2007-2008</i>
132	I Ketut Suardana	Indonesia	<i>Role of the nurses to anticipate pandemic H1N1 Virus</i>
133	I Ketut Suardana & I Putu Budi Arsana #2	Indonesia	<i>Effectiveness of TNCC assessment compared to RAH at non traumatic emergency patient</i>
134	I Ketut Suardana #3	Indonesia	<i>Evaluate process of primary nursing delivery related to work productivity in Sanglah Hospital Denpasar</i>
135	Ida Maryati	Indonesia	<i>The effectiveness of health education on self care activity and anxiety of women with advance cervical cancer in West Java</i>
136	Ilona Nuryati	Indonesia	<i>The effect of pregnant exercise to the labor process in BKIA RSK ST. Vincentius A Paulo Surabaya</i>
137	Ira Kusumawaty, SKp., MKep., MPH	Indonesia	<i>Towards healthy ageing in Palembang, Indonesia</i>
138	Jumadi Gafar, Muhammad Hakimi, Yayi Suryo Prabandari	Indonesia	<i>The influence of safe driving demonstration, talk show, and speech method toward knowledge, attitude, behaviour of traffic accident prevention (an experimental study in student of Stikes Muhammadiyah Banjarmasin</i>
139	Ngatina	Indonesia	<i>The relationship between leadership style of the room leader and the work motivation of nurse the room nurse in intensive care unit the Catholic Hospital of ST. Vincentius A Paulo Surabaya</i>
140	Rina / Sr. Fransiska	Indonesia	<i>The relationship between client's perception about therapeutic communication done by the nurse and the level of client's satisfaction</i>
141	Rini P., Wahyu W., Aryani W.	Indonesia	<i>Level of patient satisfaction with health services within the maternity ward of mitra international hospital Jakarta</i>
142	Rosamunda	Indonesia	<i>The influence of hypnobirthing toward level of anxiety of in labor patient at delivery suite of Surabaya International Hospital</i>
143	Rosdelima Simarmata	Indonesia	<i>Ensuring continued success with hand hygiene compliance in the Ramsay health Care Indonesian Hospitals</i>

NO	NAME	PLACE	TITLE
144	RSI Bintaro #4	Indonesia	<i>Improving the obedience of nurses in implementing right documentation as a part of six-right drug administration principles</i>
145	RSI Bintaro #6	Indonesia	<i>Reducing numbers of chafed nipple in breastfeeding mother at maternity ward International Bintaro Hospital</i>
146	RSI Bintaro #7	Indonesia	<i>Respon time : Administered Intravena's therapy in A&amp;E Department Bintaro International Hospital</i>
147	RSI Bintaro #9	Indonesia	<i>Reducing waiting period of intervention from 17 minutes to 15 minutes at Medical Centre RSIB</i>
148	RSI Bintaro #11	Indonesia	<i>Decrease percentage of incompleted handover at Medical Surgical Ward International Bintaro Hospital</i>
149	RSI Bintaro #12	Indonesia	<i>Decrease percentage uncompleted handover at Medical Surgical Ward January-April 2009</i>
150	RSI Bintaro #13	Indonesia	<i>Safe surgery safe lives one of patient safety in surgery- at Department International Bintaro Hospital</i>
151	Rusmala Dewi	Indonesia	<i>Analysis study on the mechanical ventilator related to the incident of VAP at ICU Mitra International Hospital 2008</i>
152	Sarah ulliya, Bambang Soepemo, Wara Kushartanti	Indonesia	<i>The influences Range of Motion (ROM) exercise to joint flexibility on elders in Panti Wening Wardoyo Ungaran</i>
153	Simplisia Guarda Mayesti	Indonesia	<i>Influence strategy cooperative learning to students learning result D-III Nursing Program in Catholic of Health Science ST. Vincentius A Paulo Surabaya</i>
154	Sri Setyarini	Indonesia	<i>Nurses perception about end of life (EOL) of ICU patient in ICU RSUP. DR. Sardjito Hospital Yogyakarta</i>
155	Sri Susilaningsih #1	Indonesia	<i>Cohesiveness of nurse-physician collaborative practice in interdisciplinary model of care</i>
156	Sri Susilaningsih #2	Indonesia	<i>Indicators of patient safety related to nursing care in the interdisciplinary model of care</i>

NO	NAME	PLACE	TITLE
157	Sri Susilaningsih #3	Indonesia	<i>Correlation between cohesiveness in the implementation of care path and patient safety in interdisciplinary model of patient care</i>
158	Sri Setiyarini	Indonesia	<i>Correlation between noise stressor and sleep disorder intensive cardiac care unit (ICCU) DR. Sardjito Hospital</i>
159	Sulikah Ani, Janny P, Natalia, Ulin M	Indonesia	<i>The relationship between handover completeness and nursing care</i>
160	Suhat	Indonesia	factors related to execution of maternal and child health management in public health centered by coordination midwife in west bandung municipality, year 2008
161	Tantut Susuanto & Lantin Sulistyorini #1	Indonesia	<i>Organization and empowerment traditional birth attendants with the game simulation method for knowledge and behavior traditional birth attendance in delivery high risk problem in community health center Jember</i>
162	Tantut susanto, Erti Ikhtiarini Dewi #2	Indonesia	<i>Effects peer group discussion with knowledge and attitudes mother groups to optimalize weaning of exclusive breast feeding in Ember</i>
163	Titih Huriah, Dewi Kusumawati		The Influence of Health Education on Mother's Capabilities for Early Detection of Children Under Five Years Old Developmental Disorders in Taruban Kulon Village, Tuksono, Sentolo, Kulon Progo.
164	Veronika Kristiastuti	Indonesia	<i>The relationship between the motivations in applying of professional team nursing care method</i>
165	Wintari Hariningsih, Hani Triyana	Indonesia	<i>Lecture of nursing and clinical practice of nursing professional student</i>
166	Wiwi Mardiyah	Indonesia	
167	Yulia Wardani #1	Indonesia	<i>The family's perception on the family member who suffer from mental illness in psychiatric unit at the Duren Sawit Hospital</i>
168	Yulia Wardani #2	Indonesia	<i>Knowledge level and role of the family in giving antipsychotic medication at home</i>
169	Yulia Wardani #3	Indonesia	<i>The contributing factors on Schizophrenia cases at Duren Sawit Psychiatric Hospital</i>

## The Analysis of Growth and Development Infants of Fishermen Family in the City of Surabaya

A.Aziz Alimul Hidayat \* dan Musrifatul Uliyah \*\*

### Abstract

The purpose of this research is to describe the growth and development of infants from the fisherman families in Surabaya. The area of this research is purposively chosen in district Kenjeran Surabaya City. This research is done cross sectional with the subject of research on healthy cooperative infants during the assessment with the parents involved. Growth test is done by observing the growth curve (KMS) and the development using Denver Development Screening Test II (DDST II) which uses 4 development aspects. They are development of fine motor, gross motor, language and social skills, with 145 samples of infants that meet the criteria of inclusion. The result of the research is that 36 of infants (24,8%) of the growth disorder, language development delay 1 (0,7%), social development delay 5 (3,4%), and no impacts in fine and gross motor development. It needs the endeavors to work out the development progress delay of infants of the fisherman families of the city, chiefly on age below 3 years because on this age the development progress of children is faster.

**KEY WORDS:** growt, development, and nutrients status.

---

\* Muhammadiyah University of Surabaya, admin@ fik.umsurabaya.ac.id

\*\* Muhammadiyah University of Surabaya, siper@ fik.umsurabaya.ac.id

## BACKGROUND

The growth and development of children is one of the indicators used to know the healthy level of children. Assessment of growth and development status can identify many healthy cases of children, such as the decrease of intellectual, creativity, skill, and finally the decrease of young generation development in the future.

Monitoring of growth and development of infants is needed to get a serious attention because it can detect early the possible healthy problems. The problem such as malfunction growth, speaking disorder, specific development disorder (reading and writing delay), etc. Those problems would be serious if they do not solve early as they could influence the development of children next.

Monitoring of growth and development of infants also notice the other factors which have some bearing on. Those factors are nutrient, stimulation, economics status, educational status, and so on. Based on the research of Sukardono (2000) poor nutrient which is affected the people around the sea shore of Kenjeran almost 45% is the parents who work as fishermen, and 55% as workers (Kompas, 2000). It can affect the growth and development of infants because nutrient is the most important factor of growth and development of children (Hidayat, 2005).

So far, monitoring of growth and development of infants in the fisherman families is lack of attention. This is due to the minimum knowledge especially family, to monitor the problems of growth of infants early.

The assessments of the growth and development using the curve (KMS) and Denver development Screening Test as the tools to detect the development of children in monitoring of growth and developmental are still mostly used in hospital, but applied rarely on infants in fisherman families, even though, that monitoring is very simple, fast, and more efficient. Consequently, the growth and development status on infants in the fisherman families is wholly undetectable.

The area chosen for research is the district of Kenjeran Surabaya on fisherman families who stay there. It is the east area in Surabaya which has heterogenic economic condition. The benefit from this research is serving the empirical data for the purpose of increasing

health quality services of infants who have growth and development delay. Practically, the results of this research can be made for the basis of development of proper building health plan.

To know whether the growth and development status of infants on the fisherman families get a delay, and how is the description of its condition, it is needed to do the research to find out what is the real growth and development status of infants on those family? In general, the purpose of this research is to find out the characteristics of infants, growth and development status of infants on the fisherman families in the city of Surabaya.

## **METHODS**

This research is using the cross sectional approach, to find out any information and describe growth and development status of infants on the fisherman families. The samples of the research are infants on the fisherman families who stay in district Kenjeran Surabaya. The exact area chosen is Tambak Wedi, because most of the family who lives there has infants. The amount of the samples needed is 145 respondents.

The samples are taken with random sampling and purposive local selection. The data collected by getting a direct interview on those families using the weight scale and height scale, then assess them with a developmental curve based on the health card (KMS) and the test of DDST II to know the developmental aspects. The variable in the research is growth and development. The data analysis is done descriptively by using the table of distribution frequency.

## **RESULTS**

### ***General Data of Infants on the Fisherman families in the City***

The test of growth and development has done on 145 infants of fishermen of the city along the research. The average age is around 12-36 months 61 (42%). The subject of infants is 51% female and 49% male, the member of siblings is 1-2 54,5%. The complete detail is in the table below.

**Table 1**

*Characteristic distribution of Infants on Fisherman families in the District of Kenjeran Surabaya July- October 2007*

Variabel	n	Percent
Age		
0-12 months	27	18,6
> 12-36 months	61	42,1
>36-60 months	57	39,3
Sex		
Male	71	49,0
Female	74	51,0
Siblings		
None	31	21,4
1-2	79	54,5
>2	35	24,1

#### *Assesment of growth and development of infants*

The result from the growth and development of infants of fisherman families in the city shows that from 145 samples assessed, 36 infants (24,8%) get a development disorder and based on the development aspect, only 1 infant (0,7%) get a language skill delay, social skill delay 5 infants (3,4%), and none on gross and fine motor. A complete detail is as below.

**Table 2**

*Distribution of growth and development status of Infants on Fisherman families in the District of Kenjeran Surabaya July- October 2007*

Variabel	N	Percent
<b>Growth</b>		
Normal	109	75,2
Disorder	36	24,8
<b>Development</b>		
Normal	138	95,2
Gross motor delay	0	0
Language skill delay	1	0,7
Fine motor delay	0	0
Social skill delay	5	3,4
Suspect	1	0,7

In table 3 seems that the distribution of subject development status of the research based on age, sex, siblings member. Age of 12-36 months get mostly the development disorder (44%). The risk of delay is greater twice than age of 0-12 months, and decreases on age 36-60 months.

The sex of infants that get a development disorder is female (66,7) greater twice than male. While from siblings dominantly get the development disorder is infant who has 1-2 siblings (61,1%). The table is below.

**Table 3**

*Distribution of developmental status of respondents based on age, sex, and siblings in district Kenjeran Surabaya July-October 2007.*

Variable	Development				Amount	
	Normal	percent	Disorder	percent	n	Percent
<b>Age</b>						
0-12 months	22	20,2	5	13,9	27	18,6
>12-36 months	45	41,3	16	44,4	61	42,1
>36-60 months	42	38,5	15	41,7	57	39,3
<b>Sex</b>						
Male	59	54,1	12	33,3	71	49,0
Female	50	45,9	24	66,7	74	51,0
<b>Siblings</b>						
None	26	23,9	5	13,9	31	21,4
1-2	57	52,3	22	61,1	79	54,5
>2	26	23,9	9	25,0	35	24,1

**In table 4** below seems that the distribution of subject development status of the research based on age, sex, siblings member. Age of less than 30-60 months is dominantly get a developmental disorder in social skill, 40,0% greater twice than age of 36-60 months who get a developmental problems and a language skill delay.

Sex category that gets a social skill disorder is male, 80%, greater four times than female who get a developmental delay. On the sibling category, infant who has 1-2 members, about 60% gets a social skill delay. See table below.

**Table 4**

*Developmental status of infants on Fisherman families based on age, sex, and siblings member in district Kenjeran Surabaya July-October 2007*

Variable	Development								Amount	
	N	percent	LD	percent	SD	percent	S	percent	n	Percent
Age										
0-12 months	25	18,1	-	-	2	40,0	-	-	27	18,6
>12-36 months	59	42,8	-	-	2	40,0	-	-	61	42,1
>36-60 months	54	39,1	1	100	1	20,0	1	100	42,1	39,3
Sex										
Male	66	47,8	-	-	4	80,0	1	100	71	49,0
Female	72	52,2	1	100	1	20,0	-	-	74	51,0
Siblings										
None	31	22,5	-	-	-	-	-	-	31	21,4
1-2	74	53,6	1	100	3	60,0	1	100	79	54,5
>2	33	23,9	-	-	2	40,0	-	-	35	24,1

Note:

- N : Normal
- LD : Language Delay
- SD : Social Delay
- S : Suspect

## DISCUSSION

Infant period is the most important period of growth and development because in this period the growth and development of infants is fastest and would be the basis of next growth and development. The result of the research shows that from 145 infants assessed, 36 infants (24,8%) get a development disorder and based on the analysis, the average age of those infants is age 12-36 months, 44,4%. Even though, the development status of infants of fishermen still show a greater than 75% get a good development, but the development process on the age of 12-36 months that should be fast, in the other hand get a development disorder. The development disorder found due to the decrease of the quality of life that still has a relationship with the nutrient status as the problem that needs to be solved. According to Narenda (2002), the development process on that age should be fast, especially in the cerebral structure. On the age 3 years the development of cerebellum will reach 50% from the adults, so to get a maximum development process, the children need to get enough protein, energy, and stimulation.

Most of the development disorder of infants on fisherman families are on female (66,7%) and who has 1-2 siblings 61,1%. The result of the research assumes that male is tend to get a great attention than female in the development process as he would be the patron in the family. This distinction may be caused by the different nurture style. However, the member of siblings could also influence the development process when there is no balance on the distribution of food supply with the members of family (infants).

Indonesia as the development country, the environment factors can be the causes of developmental disorders of children due to the low social economic condition (poverty), lack of the knowledge of its people about the developmental process, especially on the fisherman families that most of them have a low social economic condition. Those factors are like the environment of nurture, stimulation, and birth history and so on. These factors are usual in the mind of Indonesian people and they do not realize that they have significant roles in the developmental process of children (Soetjiningsih, 1998).

*3 rd International Nursing Conference: Health and The Impact of Global Warming  
Sheraton Mustika hotel Yogyakarta Indonesia, November, 17-19, 2009*

While the developmental process on infants is normal, and only 4,8% who get a developmental delay especially on the language and social skill. Some reasons that cause these problems such as a bad stimulation from the family and a wrong nurture. This is because of lack of knowledge and most of the mothers are servants and work part time to help the fathers, so their time that should be for nurturing their children is not fulfilled well. And sometimes, they entrust their children to neighbors and as the result, their social skills are delay. While the social economic condition of the fisherman families also the factor that influence the developmental process of children, when they have a low income the balance of food supply and nutrient is not enough, and the problem of giving stimulation tools (games and toys) may cause the developmental delay of their children (Wong, 2000).

Fadlyana et all (2003), report that the delay on social skill in the city is higher than in urban area ( $p=0,019$ ). Developmental delay of infants is the potential decrease of quality of life in the future if it is not handled soon by finding a proper solution. As Frankenburg at all (1983) show that if the solution for children who have developmental disorders is not given immediately, 89% of them will fail in their study.

Based on the theory of developmental process of children, shows that factors influenced this problem can be internal and external factors. Those factors according to Tanuwidjaya (2002), sex, genetic disorder, chromosome disorder, and age (internal). External factors begin from birth such as nutrient, mechanism, toxin, endocrine, radiation, infection, immunology disorders, and psychology of mother. Birth factors and post natal such as child's nutrients, chronic disease, physical environment, psychological, endocrine, social economic, nurturing environment, stimulation and medicines.

## CONCLUSION

Developmental status on infants in the fisherman families who stay in district Kenjeran Surabaya is normal. The infants of 12-36 months who have developmental disorder are female and who have 1-2 siblings and the developmental status of this is normal. Language and social skills disorders on age of 0-36 months of male and who have 1-2 siblings.

To increase the developmental status, needs the understanding of parents to fulfill the children's nutrients throughout following health programs of mothers and children, and benefit the existing resources in the fisherman families to support the children's nutrients then put them as the priority.

## REFERENCES

- Betz, C.L. (1996). *Mosby's pediatric nursing reference*, Third Edition, by Mosby Year Book Inc.
- Fadlyana, E., dkk (2003). Pola keterlambatan perkembangan balita di daerah pedesaan dan perkotaan Bandung, serta factor yang memengaruhinya, *Sari Pediatri*, Vol 4, Maret 2003: 168-175
- Frankenburg, W.K., (1983). *Developmental assessment. Dalam: Levine, MD, penyunting. Developmental behavioral pediatrics*, Philadelphia Saunders, h. 27-37
- Fransisca, H., Soedjatmiko. (2004). Masalah kesehatan dan tumbuh kembang pekerja anak jalanan. *Sari Pediatri*, 5 (4), 138-44.
- Gunarsa, S.D (1997). *Dasar dan teori perkembangan anak*, Jakarta, Gunung Mulia
- Hidayat, A.A.A., (2003). Masalah tumbuh kembang anak, *Suara Muhammadiyah* No. 21-22 tahun ke-88
- Hidayat, A.A.A., (2004). Analisa faktor yang mempengaruhi tumbuh kembang anak, *Medikes, Jurnal Keperawatan dan Kesehatan* No.2 tahun ke-1
- Hidayat, A.A.A., (2005). *Ilmu keperawatan anak 1*, Jakarta, Salemba Medika
- Narendra, M, dkk (2002). *Tumbuh kembang anak dan remaja*, Jakarta, PT Sagung Seto
- Suhardono, E (2000). *Pantai kenjeran pun tercemar merkuri*, Kompas Iptek 21 Pebruari
- Soetjiningsih (1998). *Tumbuh kembang anak*, Jakarta, EGC

*3 rd International Nursing Conference: Health and The Impact of Global Warming  
Sheraton Mustika hotel Yogyakarta Indonesia, November, 17-19, 2009*

Wong, D.L. & Whaley (2000). *Nursing care of infants and children*, St Louis Mosby

*3 rd International Nursing Conference: Health and The Impact of Global Warming  
Sheraton Mustika hotel Yogyakarta Indonesia, November, 17-19, 2009*

---



## CERTIFICATE OF RECOGNITION

Ref. 303 / PP.PPNI / SKP / XI / 2009

This Certificate is awarded to :

**A. Aziz Alimul Hidayat**

In recognition of the valuable contribution and an outstanding performance to be as a Presenter in Oral Presentation at The 3<sup>rd</sup> International Nursing Conference  
"Health and The Impact of Global Warming"  
held on November 17-19, 2009, Yogyakarta Indonesia  
2 CNEV endorsed by Indonesian National Nurses Association

Prof. Dra. Elly Nurachmah, DNSc, RN.  
Head of Association of  
Indonesian Nursing Centers

Laiad Jamjan, Ed.D., R.N.  
Director of BCN Nopparat Vajira  
Chair of the Central College Network 1