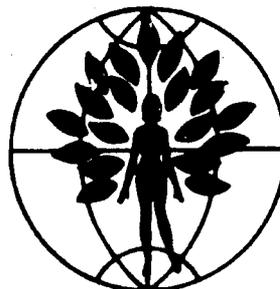


REPRINTED FROM

PN-ABG-100 90-10

INTERNATIONAL JOURNAL OF
**Gynecology
& Obstetrics**



Official publication of the
International Federation of Gynecology and Obstetrics and
Family Health International

ELSEVIER

Editor: J.J. Sciarra (Chicago, USA)

FIGO EXECUTIVE BOARD/EDITORIAL BOARD

President: J.A. Pinotti (Brazil)
 Vice-President: L. Carenza (Italy)
 President-Elect: J.J. Sciarra (USA)
 Treasurer: H. Ludwig (Switzerland)
 Secretary General: D.V.I. Fairweather (UK)
 Deputy Secretaries General:
 R. Lambotte (French language)
 T. Chervakova (Russian language)
 O. Rodriguez Armas (Spanish language)

Member societies represented:

Australia	Japan
Cuba	Kenya
Denmark	Korea
Finland	Mexico
France	Philippines
FRG	Poland
Greece	Sudan
Guatemala	UK
Hong Kong	USA
India	USSR
Italy	

Honorary Editors: H.A. Kaminetzky (USA)
Associate A. Ingelman-Sundberg
 (Sweden)

Managing Editor: K. Williams
 Tel. 312-908-7510

All manuscripts should be sent to the Editorial Office of the *International Journal of Gynecology & Obstetrics*: J.J. Sciarra MD, PhD, Professor and Chairman, Northwestern University, Department of Obstetrics and Gynecology, 333 East Superior Street, Chicago, IL60611, USA.

Associate Editors: W. Kuhn (FRG)
 L. Hamberger (Sweden)

Editorial support provided by Family Health International, Research Triangle Park, NC.
Managing Editor: E. Robinson **Staff:** D. Wade

General Information

The International Journal of Gynecology & Obstetrics publishes articles on basic and clinical research in the fields of obstetrics and gynecology and related subjects, with emphasis on matters of worldwide interest. The journal is cosponsored by the International Federation of Gynecology and Obstetrics (FIGO) and Family Health International (FHI).

Partial support for the preparation and developing-country distribution of this publication is provided by Family Health International with funds from the United States Agency for International Development (USAID). The views and interpretation presented are those of the authors and should not be attributed to USAID or to any individual acting on its behalf.

Special regulation for authors. Upon acceptance of an article by the journal, the author(s) will be asked to transfer copyright of the article to the publisher. This transfer will ensure the widest possible dissemination of information.

Submission of a paper to *International Journal of Gynecology and Obstetrics* is understood to imply that it is not being considered for publication elsewhere and that the author's permission to publish his/her article(s) in this journal implies the exclusive authorization of the publisher to deal with all issues concerning the copyright therein. Further copyright information can be found on p. iv of the preliminary matters to the volume.

Copyright © 1989 by the International Federation of Gynecology and Obstetrics. All rights reserved. No part of this publication may be reproduced stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise without permission in writing from the copyright owner. 0020-7292/89/\$03.50 + \$0.00.

Breastfeeding trends and the breastfeeding promotion program in the Philippines

N.E. Williamson

Program Evaluation Division, Family Health International, P.O. Box 13950, Research Triangle Park Branch, Durham, NC 27709 (USA)

Abstract

Breastfeeding duration and incidence have declined in the Philippines since 1973, particularly in urban, better-educated, and higher income groups. As more and more women move into these modern groups breastfeeding may continue to decline, making attempts to decrease fertility more difficult. The National Movement for the Promotion of Breastfeeding seeks to overcome the declines by encouraging a wide range of breastfeeding promotion activities including improving hospital practices and implementing a 5-year plan.

Introduction

In the context of East Asia, the Philippines is an under-achieving country; living standards have not improved much in recent years. In this setting (see Table I), breastfeeding is particularly important for child health and child nutrition as well as child spacing. The Philippines is also a predominantly Catholic country where family planning remains controversial.

The Philippines has comparable national data on breastfeeding trends for the past several decades, which permit the monitoring of declines in breastfeeding and identification of the groups that have changed the most. There have been changes in the mean duration of breastfeeding as well as in the incidence of

Table I. The Philippines (1988).

Population	63 million
Projected population (2000)	85 million
Number of women aged 15—49	14.5 million
Population growth rate	2.8% per year
Total fertility rate	4.7 children
Geography	7100 islands
Percent urban	41
Percent catholic	83
Infant mortality rate	51/1000

Sources: Population Reference Bureau, World Population Data Sheet, 1988; Background Notes, State Department Bulletin on the Philippines, Bureau of Public Affairs, 1986.

breastfeeding, the percentage of infants still being breastfed at different ages.

Trends in breastfeeding duration

Table II shows the trend in duration of breastfeeding in the Philippines, based on four national surveys. (Additional surveys were conducted in 1986 and 1988 but results are not yet available.) Between 1963 and 1982, breastfeeding duration declined by 16% (from 14.5 months to 12.1 months).

By Western standards, 12 months is still a substantial duration. But the decline is of concern in the Philippines where most family incomes are low, child nutrition is often inadequate, and there is little use of modern family planning methods, compared with many other Asian countries. Breastfeeding, which suppresses ovulation, remains one of the

Table II. Trend in duration of breastfeeding in the Philippines (in months).

1963—1967	1968—1972	1973—1977	1978—1982	1983—1988
14.5	13.7	12.9	12.1	???

Source: [1].

[Note by N. Williamson: *A linear extrapolation of the trend would yield a value of 11.3 months for 1983—1988].

major means of child spacing in the Philippines.

As indicated in Table I, the total fertility rate remains moderately high in the Philippines at 4.7. From the mid-1960s to mid-1970s, declines in fertility were mainly due to increased age of marriage for women and increased contraceptive use. Recently, age of marriage stabilized at 23—24 years of age and fertility declines are due to increased contraceptive use alone. But since breastfeeding is declining (thus reducing the child spacing effects), about a quarter of the fertility decline from increased contraceptive use is being negated by fertility increases from declines in breastfeeding [1]. Thus, declines in breastfeeding duration should interest family planners as well as health policymakers and nutritionists [2].

A recently published paper [3] gives durations of breastfeeding in the period 1973—1988 by urban/rural, migration status, region, mother's education, mother's paid employment, and father's income (see Table III). Women with the shortest durations lived in Manila, had 10+ years of education, and had modern occupations. Children whose fathers had the highest incomes also had shorter breastfeeding durations. It is encouraging, however, that even among urban residents, breastfeeding duration averaged 10 months in 1983.

Between 1973 and 1988, the biggest increases in breastfeeding duration were experienced by urban migrants, women with 7—9 years of education, and women in transitional occupations (i.e. sales, clerical). The biggest decreases were for the highest income families.

Trends in incidence of breastfeeding

Table IV shows how many babies are never breastfed or breastfed only a few months in urban and rural areas for 1973 and 1983 [3]. In 1973, 89% of infants were breastfed at

Table III. Duration of breastfeeding in the Philippines by socioeconomic characteristics: 1973 and 1983 (in months).

	1973	1983	Difference
Total sample	11.8	12.0	+ 0.2
Residence			
Urban	10.8	11.2	+ 0.4
Rural	12.5	13.5	+ 1.0
Migration status			
Urban migrant	10.3	13.2	+ 2.9
Urban resident	11.4	10.0	- 1.4
Region of residence			
Manila	8.7	8.1	- 0.6
Luzon	12.1	12.7	+ 0.6
Visayas	12.8	14.1	+ 1.3
Mindanao	11.5	11.1	- 0.4
Mother's education			
None	10.1	11.8	+ 1.7
1—3 years	12.1	13.5	+ 1.4
4—6 years	13.1	13.4	+ 0.3
7—9 years	10.5	13.6	+ 3.1
10+ years	8.0	9.5	+ 1.5
Mother's paid employment			
None	12.1	12.1	0.0
Traditional	13.4	13.8	+ 0.4
Mixed	11.1	12.2	+ 1.1
Transitional	7.8	10.1	+ 2.3
Modern	8.4	7.5	- 0.9
Father's annual income			
Low	14.1	13.8	- 0.3
Medium	12.1	10.3	- 1.8
High	11.4	8.5	- 2.9

Source: [9].

Table IV. Incidence of breastfeeding in the Philippines by age of infant: 1973 and 1983.

Age (months)	1973			1983		
	% Urban	% Rural	% Total sample	% Urban	% Rural	% Total sample
0	77	93	89	73	90	84
3	64	85	80	57	84	74
6	53	78	72	48	79	68
12	16	28	25	23	44	36
24	3	3	3	8	10	9

Source: [3].

birth; this had declined by 5 percentage points by 1983. Thus, by 1983, 10% of rural infants and 27% of urban infants were never breastfed. These figures are worrisome, given the fact that few Filipino families can afford to purchase infant formula and many do not have the facilities for safe artificial feeding. Furthermore, these infants do not receive the immunological protection breastfeeding conveys.

Table V presents incidence by characteristics of the mother (urban/rural, region, education, and paid employment). In 1983 in Manila, 34% of the infants were never breastfed. A similar percentage (36%) of infants born to mothers with modern occupations and a quarter of infants born to the best-educated mothers were never breastfed.

On the other hand, the only increases in incidence of breastfeeding between 1973 and 1983 were contributed by the best-educated women and those with modern occupations. So, more of these women may be realizing that "breast is best" even if the duration is relatively short.

Breastfeeding may decline further in the Philippines if effective promotion programs are not carried out because modernization means more women move into the lower duration and incidence categories: more people live in urban areas, more go beyond primary school, and more women are employed in modern occupations. Even if current

breastfeeding patterns stay the same for each group but more women move into the modern sector, breastfeeding will decline overall. Table VI shows the trends in socioeconomic

Table V. Incidence of breastfeeding in the Philippines by characteristics of mother: 1973 and 1983.

	% 1973	% 1983	% Differences*
Total sample	89	84	-5
Area of residence			
Urban	77	74	-4
Rural	93	89	-4
Region of residence			
Manila	76	66	-10
Luzon	88	85	-3
Visayas	92	80	-11
Mindanao	91	86	-5
Mother's education			
None	93	94	0
1-3 years	92	91	-1
4-6 years	93	89	-3
7-9 years	87	83	-4
10+ years	67	74	+7
Mother's paid employment			
None	92	86	-6
Traditional	95	93	-2
Mixed	83	79	-4
Transitional	86	73	-13
Modern	57	64	+6

Source: [3].

*Difference is based on non-rounded off figures. Hence, subtracting the rounded off numbers in columns for 1973 and 1983 will not necessarily yield the number in the difference column.

Table VI. Trends of socioeconomic characteristics of the Philippines: 1973 and 1983.

	1973	1983
Residence		
% Metro Manila	7	11
% Other Urban	19	21
% Rural	75	68
Mother's education (years)	6.0	7.6
Father's education (years)	6.1	7.6
% of households with electricity	23	46
Mother's paid employment		
% None	77	81
% Traditional	8	4
% Mixed	10	9
% Transitional	1	2
% Modern	3	5

Source: [9].

characteristics of households for 1973—1983. For example, 75% of women lived in rural areas in 1973 compared with 68% in 1983. By 1988, as indicated in Table I, the population was 59% rural.

Defining breastfeeding problems in the Philippines

Compared with Western countries and many Latin American countries, the breastfeeding situation in the Philippines is not dire. However, there are problems that go beyond declines in duration and incidence and include how women breastfeed, local beliefs, the role of milk companies, and the lack of encouragement of breastfeeding in private health facilities.

Data have been analyzed only up to 1983 and we must wait to see the impact of recent breastfeeding promotion activities. However, based on available national surveys, it is clear that breastfeeding incidence and duration have declined, although not as precipitously as some breastfeeding promoters argue. Given trends toward urbanization, better education, and more modern occupations for

women, we should expect further declines unless there are countervailing breastfeeding promotion activities. Incidence is fairly high: 84% of Filipino infants were breastfed in 1983. But, a goal for the Philippines could be close to 100% breastfeeding. In Thailand for example, incidence has recently increased and breastfeeding is now almost universal [4].

How women breastfeed and local beliefs about breastfeeding are very important. Women in the Philippines (as well as in neighboring Asian countries) have a number of negative beliefs, such as, that the colostrum is "dirty milk" to be discarded. Similarly, women may delay breastfeeding until several days after birth. Some women believe that a mother should not breastfeed when she is too hot, too cold, tired, sick or angry [5—7]. Even more serious is the practice of initiating supplements and non-nutritive liquids very early, which introduces contaminants and reduces the contraceptive effects of breastfeeding. Mothers often also stop breastfeeding a sick infant (including one with diarrhea).

There are practical problems with breastfeeding as well. Many Filipinas work away from home and find it difficult to integrate breastfeeding into their schedules. Working mothers may not know much about milk expression and are probably not aware that expressed milk can be safely stored at room temperature for up to 6 h and up to 24 h in a refrigerator [8].

Companies promoting and selling milk and infant formula are very influential in the Philippines. They advertise intensively and assist hospitals and health professionals with equipment, travel, support of meetings, etc. Government officials responsible for monitoring the National Code of Marketing of Breast-milk Substitutes, Breast-milk Supplements, and Other Related Products (Milk Code) are sometimes not a match for the milk companies.

Finally, although the Department of Health has required rooming-in in all government-supported health facilities and extended

that policy to private facilities, private hospitals often do not encourage women to breast-feed. Some even have policies which discourage breastfeeding.

The Philippine breastfeeding promotion program

Fortunately, in the past decades many Filipinos in both the public and private sectors have become concerned about breastfeeding

promotion. Dr. Natividad Clavano instituted a strong hospital-based breastfeeding promotion program in Baguio in the 1970s and widely publicized her experience. Table VII presents a chronology of recent events and accomplishments in breastfeeding promotion, including research activities. United Nations Children's Fund (UNICEF)'s leadership and financial assistance to the Philippine program should be noted.

For a country considering a breastfeeding

Table VII. Chronology of the Philippine breastfeeding program.

1975—1978	Philippines participated in World Health Organization (WHO) multi-country study on breastfeeding patterns and later in milk composition study
Early 1980s	Beginning of regular interagency meetings on breastfeeding promotion, chaired initially by Dr. Amanda Valenzuela
1980	Ministry of Health (MOH) directed public health facilities to promote breastfeeding and reinforce the rooming-in policy
1982	MOH directed public health facilities to remove commercial infant feeding displays and substitute MOH posters on breastfeeding Study conducted on infant formula marketing and health institution policies in Metro Manila [5]
1982—1984	Longitudinal study on decision making regarding infant feeding practices [7]
1983	National Movement for Promotion of Breastfeeding established Beginning of United Nations Children's Fund (UNICEF) support of breastfeeding program (under CPCII: 1983—1987) Conference on breastfeeding research held in Manila (outcomes included a Population Forum issue on breastfeeding and an edited collection, <i>Breastfeeding and Fertility</i>)
1983—1985	Data Collection (first year of life) for longitudinal infant feeding study in Cebu
1984	Beginning of Wellstart training of Filipino participants Preparation of book/slides for introducing breastfeeding into medical school curriculum Beginning of breastfeeding promotion messages in mass media
1985	MOH directed private hospitals to adopt rooming-in
1986	Adoption of new Philippine Constitution with references to the right to health and the need for protection of working women by providing safe working conditions taking into account their maternal functions
Oct 20, 1986	Adoption of National Code of Marketing of Breastmilk Substitutes, Breastmilk Supplements and other Related Products signed by President Corazon Aquino
1988	Beginning of second five years of UNICEF support (CPCII: 1983—1992) for breastfeeding promotion as part of program to strengthen health services for child survival and maternal care Publication of Annotated Bibliography: <i>Breastfeeding in the Philippines: 1956—1986</i> prepared by Minerva B. Inciong National Fertility Survey conducted Draft prepared for Five Year Plan (1988—1992) for breastfeeding promotion in the Philippines

promotion program, the chronology in Table VII could provide an indication of some of the activities needed to institutionalize breastfeeding promotion. One of the most significant events was the official adoption (and promulgation) of the Milk Code in October, 1986.

Central to breastfeeding promotion in the Philippines is the National Movement for the Promotion of Breastfeeding (NMPB). The NMPB is housed in the Department of Health and is chaired by the Undersecretary for Public Health Services. It is composed of 39 member agencies: 14 governmental organizations and 25 non-governmental agencies/institutions.

The NMPB has an Executive (or Management) Committee and three sub-committees: Policy; Research; and Information, Education, and Communication (IEC). There are seven task forces under the Research and IEC sub-committees. The NMPB receives support from UNICEF and has a small secretariat which handles administrative work. For many of its participants, the NMPB is a "labor of love," yielding no financial rewards and little recognition. Recently, the

NMPB prepared a "Five Year Plan for Breastfeeding Promotion" and is now seeking funds to implement the program.

Remaining challenges

There have been a number of accomplishments of the Philippine breastfeeding program. Table VIII lists some of the remaining work. For example, now that rooming-in is required in government-supported facilities, there is a need for education programs for women so that they will continue healthful breastfeeding practices once they leave the hospital. Similarly, if the goal is to get virtually all women at least to initiate breastfeeding, the participation of private hospitals (and within these, the obstetricians) will be essential.

We know from other research that breastfeeding contributes to child survival, child health and nutrition, and child spacing. Breastfeeding as a means of child spacing may encounter less opposition from the Church than other family planning methods. Special efforts might be made to promote breastfeeding in cooperation with Church organizations.

Table VIII. Challenges of the Philippine breastfeeding promotion program.

Health facilities

- Now that rooming-in has been established in government health facilities, the next step is to start breastfeeding education to counteract undesirable practices (i.e. early supplementation)
- Ensure that sick newborns get breast milk
- Support breastfeeding promotion and rooming-in in private facilities

Information, education, and communication (IEC)

- Build a sustained program through the mass media
- Discourage the advertising and promotion of artificial infant foods
- Encourage breastfeeding mothers to postpone the introduction of non-breast milk foods until 4–6 months

Training

- Extend Wellstart training to more hospitals
- Help family planning providers to meet the child spacing needs of breastfeeding women
- Train health professionals at all levels about good breastfeeding practices and the importance of breastfeeding promotion; special programs might be conducted for obstetricians

Outreach

- Work with Church-related organizations and other networks to promote breastfeeding
 - Educate working women at their work sites on how to maintain breastfeeding
-

Research needs

There has been considerable breastfeeding research in the Philippines. Abstracts have been prepared and published in 1988 under the auspices of the NMPB and the Nutrition Foundation of the Philippines. High priority research activities for the future include:

(1) continued monitoring of trends and patterns of breastfeeding including analysis of the 1988 national survey;

(2) evaluation of the impact of rooming-in programs including whether rooming-in significantly changes breastfeeding practices after women leave the hospital and financial costs and benefits of rooming-in for hospitals;

(3) studies on the cost-effectiveness of different strategies for increasing breastfeeding incidence and duration and changing breastfeeding beliefs and practices;

(4) testing of strategies for helping working women to breastfeed;

(5) research on obstacles to breastfeeding in private hospitals; and

(6) studies on the timing and nature of initiation of contraception among breastfeeding women.

References

- 1 Casterline JB, Raymundo C, Cabigon J: Trends in fertility in the Philippines: an integrated analysis of four National Surveys. Draft Report, Quezon City, Philippines. Brown University and the University of the Philippines. Population Institute, 1988.
- 2 Thapa S, Short RY, Potts DN: Breast feeding, birth spacing, and their effects on child survival. *Nature* 335: 5192, 1982.
- 3 Popkin BM, Akin JS, Flieger W et al: Breastfeeding trends in the Philippines, 1973 and 1983. *Am J Publ Health* 79: 32, 1989.
- 4 Chayouan N, Knodel J, Wongwoosin K: Infant feeding practices in Thailand: an update from the 1987 Demographic and Health Survey. Submitted for publication. December, 1988.
- 5 Simpson-Herbert M: Infant feeding in Metro Manila: infant formula marketing, and health institution policies, RMAF Research Report, Vol. II. Manila, Philippines, Ramon Magsaysay Award Foundation, 1986.
- 6 Simpson-Herbert M, Makil LP: Family planning, breastfeeding, and pregnancy among urban Filipino women. *Fertility Determinants Research Notes* 17, March, 1987.
- 7 Simpson-Herbert M, Cresencio EN and Makil LP: Infant feeding in Metro Manila: infant feeding decisions, infant health and family planning among low income families. RMAF Research Report, Vol. I. Manila, Philippines, Ramon Magsaysay Award Foundation, 1986.
- 8 Population Council: Breastfeeding: A Nurses' Guide. Undated.
- 9 Popkin BM, Akin JS, Flieger J, Wong EL: Socioeconomic Change and Breastfeeding Trends: The case of the Philippines. University of North Carolina, Chapel Hill, NC, 1987.

INSTRUCTIONS TO AUTHORS

On submission of a manuscript to the *International Journal of Gynecology and Obstetrics*, please refer to the full Instructions to Authors which appears at the back of each issue of the Journal. Please also use the Checklist below.

FINAL CHECKLIST AND MAILING INSTRUCTIONS

Please attach a photocopy of this form to your manuscript, checking each item to be certain that the article is in compliance with the format and requirements of the International Journal of Gynecology and Obstetrics.

TYPE OF ARTICLE: Please specify:

- Clinical/research article**
- Preliminary report**
- Review article**
- Brief communication**
- Case report**
- TITLE PAGE:** This page should contain (a) title and sub-title (if any) of the paper); (b) name(s) of author(s); (c) affiliation(s) of author(s); (d) running headline of 40 characters or less; (e) 3–6 keywords.
- NUMBER OF AUTHORS:** Do not list more than six authors.
- ABSTRACT:** The abstract should be no more than 75 words in length.
- SYNOPSIS:** On a separate page, provide a one- or two-sentence synopsis no longer than 25 words of the conclusions of the paper for the table of contents.
- DRUG NAMES AND DOSAGES:** Review drug names and dosages with care. **The author is responsible for all recommended dosages.** Include generic names of all pharmaceutical preparations and, where appropriate, the trade name and manufacturer's name and address in parentheses following. This information should be included on first mention of the drug in the article.
- FIGURES AND TABLES:** Check to see that all figures, legends, and tables are enclosed. Legends should be typed on a single separate page, figures with Arabic numerals and tables with Roman numerals. Figures must be of publication quality, in black and white; color figures are printed at the author's expense.
- REFERENCES:** Please use the IJGO format (see full Instructions to Authors). You should include no more than 20–25 references, limited, in general, to the last decade, and all in English.
- NAME AND ADDRESS FOR REPRINT REQUESTS:** Use only initials, surname and mailing address. Do not include academic titles.
- AUTHOR(S) GUARANTEE FORM:** This form should accompany the manuscript and include the original signature of each author. The form is on the reverse side of this page.
- TRANSMITTAL LETTER AND MAILING:** Send the original and 3 photocopies of the manuscript with a transmittal letter and complete address of the corresponding author, to:
John J. Sciarra, M.D., Ph.D., Editor
INTERNATIONAL JOURNAL OF GYNECOLOGY AND OBSTETRICS
Room 490
333 East Superior Street
Chicago, Illinois 60611
If you have any questions, please write Ms. Kelley Williams, Managing Editor, at the above address, or phone: (312) 908-7510. Telefax: (312) 908-9574.