

A Review of and Reflection on Demand-Side Measures of Family Planning

Amy Tsui Professor Emerita Johns Hopkins Bloomberg School of Public Health May 31, 2023

Points covered

- Half a century of strong measurement of family planning demand
- Largely driven by interests in fertility outcomes
- Focus of frameworks driving measurement have changed over time
- Sources of family planning data are largely unchanged
- A new framework will require broad consensus and buy-in and better data

What is unique about the history of FP measurement (in LMICs)?

- It's predominantly been household survey-based
- Face-to-face interviews with samples of women of reproductive age
- It measures FP as contraceptive use, abortion use less reliably
- It's been largely population-based
 - Supports international donor monitoring



Source: Alkema et al., Lancet, 2013

Three main sources of FP data

TAMU Y DE ANNING CLIENT ASSESSMENT RECORD				CLIENTID:					
FAMILY PLANNING CLIENT ASSESSMEENT REGUTO netrotions for Physiolans, Nulleas and Materiani Make sure that the client Is not pregnan using the questions listed in SIDE B. Completely fill out or check the required information representative are asserted heteroffraction for further medical evaluation.				of by PHILHEALTH NO.:			1.11		
				I. Refer NHTS7 : D Yes D No					
corology for any apportant resolvements of the set					7	-	-		
Last Name Given Nam	10		MI	Del	e of Birth	Age		Compate	n,
COLUMN COLUMN					_		-		
No Street Barangay Municipality/Ca	y Pr	ovince	Conte	act Number		Civil Status		Reigion	
AME OF SPOUSE				!_	_!			Onesimente	-
Last Name Given Nam	90		M	Da	e of Bath	49		Occupan	
NO. OF LIVING CHILDREN: PLAN TO HAVE MORE CH	ILDRENT	Yes 1	D No	AVERAC	E MONTHL	Y INCOME:	-	-	-
Type of Client						Currentil	and:		
Now Acceptor Reason for FP: specing Imiting off	vers		Previously used Method (for Current User):						
Current User Reason for FP: D spacing D Imling D of	hers		Dispant Clob Done Dreat						
Changing Method Reason: I medical condition I side-effects				1 AM	CI SDM	IT BOT	D BOM	MINIM	
Changing Clinic						-			
		- 1	IV. F	ISKS FO	RMOLE	NCE AGAI	NST WOR	IEN (VAW)
I. MEDICAL HISTORY			 his 	tory of don	testic violen	De or VAW		TYes	No
Dogs the cent have any or ever blowing /	CIY45	DNo	. un	pleasantre	iationship w	th partier		□Yes	No
 better of stroke / heart allock / hypertension 	TYes	DNo	. per	ther does	not approve	of the visit k	FP clinic	C Yes	DNo.
non-taumatic hemotions / tropuent bruising or gum bleeding	TYes	DNo	R	elerred lo:	C DSMD				
 ourrent or history of breast cancer / breast mass 	OYes	DNo			C WCPU				
 severe chest pan 	DYes.	DN0			D NGOs				
 cough for more than 14 days 	CY45	DN0	-		C Others	(Specily:			
· pundice	DYes.	DNo	V. P	HYSICA	LEXAMI	NOTAN			
 unexplained vagnal bleeding 	DY05	DNo	Weight		kg	Blood pri	issure:	minteg	
 abnormal vaginel decharge 	C Yes	DNo	Height		m	Pube rai	K	/mm	
 intoke of phenobarb tai (anti-selzure) or ntampion (anti-TB) 	CY65	DN0	SKIN			EXTREM	ITIES		
 Is the client a SMOKER? 	C Yes	DN0		rmal	1				
 With Disability? 	C'Yes	DNo	D pa	AD		Charle	on Hers		
(ITYES please specify:			D ye	Nowish		C. van	CV AND NAT	108	
II. OBSTETRICAL HISTORY				GIRGIGITH		PELVIC	Acceptore	-Cit	
Number of pregnancies. GP			CON	UNCTIVA	-	(Por los	al		
Fullierm Premature				W TITLES		E mess			
Aborton Living children		1	C pa	Rowith		D abno	rmai discha	:ge	
Date of last delivery//			NECH	(*		D cervi	cal abnorma	alifest a	
Type of last delivery CIVaginal Cesarean Section			17.00	rmal			D wats		
Last mensitual period		1		ick mass			D polyp	or cyst	
Previous mensional period			11 44	Narged lyn	ph nodes		D infam	mation or en	esion
Mensrual low			BREA	IST:			D blood	y discharge	
Constants (3-5 parts per day)				lama		C corv	cal consiste	ney	
There (15 out nots day)				855			D trm	sot	
C Dysmoortheb				ople dischi	at De	C cerv	cal landern	105	
C Hydractions mole (within the last 12 months)			ABDO	OMEN		C adre	ical mass / 1	endorness	
Happy of ecopic pregnancy	1.1			ormal		uteri	te position:		
III. RISKS FOR SEXUALLY TRANSMITTED INFECTION	ONS			bdominal n	4355		(1 me)	have	
Does the client or the client's partner have any of the following?			O vi	aricosãos				loved	
 abnormal discharge from the genital area 	Tes	DN0				-	na rientr	am	
# "YES" please indicate if from: DVaging DPenis	_			ACTIVITY OF	THINKINT	L) Gast	and an part of		
 sores or ulcers in the genital area 	Yes	UN9	ACK	NUM LED	and the S	thursday No.	no fiscario	of the clink	: has faly
 pain or burning sensation is the genital area 	Tayes		This	in to certil	be differe	at methods	avalable in	tomily plans	ning and I
 history of reament for sexually transmitted 	Lites	2000	tooly	choose E	00			_ method.	
intectors	TYes								
 HIV / ADS / PONC FLAMMARY ORGAN 			-	C	int Signatur	0		Date	
Inglant - Progestin subdemail in plant, NJD - Introductive device; BTL - Bilden Management	if tubel liget fin only pills	Int: NSV -	I her Reck	eby conse	ntio the inc	tusion of my	FP Form	in the Far	niy Health
ecisionel envelopment method, 50M = Stenderd days method, 66T = Basel 4m	ly temperat	- 1008 -		• •					
Gange evulation method. Cliff + Cervicel motus method; STM = Symptothermal method						and the second se		10.000	

Philippine health system FP client record 1. Client and facility records (MIS)

2. Commodities (purchases and consumption)

3. Sample surveys
Female respondents of reproductive age
Some male respondent samples



UNFPA Kenya

Family Planning in Taiwan

AN EXPERIMENT IN SOCIAL CHANGE

BY RONALD FREEDMAN AND JOHN Y. TAKESHITA



FP Experiment in Taiwan, 1963-66

Intentions to Accept Family Planning

10 VIII-3. Cumulative Acceptance Rates to End of Each of Four Time Periods, by Initial Acceptance Intention

TADIC	Cumulative acceptance rate to end of:					
		Experimental	period.	Extension period	Free inser- tion period	
Mon Status	Number in 5 base group	Within 30 days of home visit	Feb. 1963- Mar. 1964	Apr. 1964 Dec. 1964	Jan. 1965- July 1965	
Intention et	1,839	*	1	2	2	
Accepted before home visit	226	100	100	100	100	
Accepted on home visit	374	100	100	100	100	
Stated intention to accept:	1 703	13	28	41	44	
soon eventually	4,307	1	8	11	15	
Total intending to accept	6,010	4	16	19	23	
stated intention never to accept becaus	ie:		en staate te		200 001	
landy using contraception	1,779	2	14	16	19	
ambivalent or undecided	573	3	18 6	10	12	
opposed to general idea and others	440	and strend		16	10	
Total intending never to accept	2,800	2	14	10		
Total intending never to accept	1,021	2	13	16	19	
excluding these diffield	144	the second - the	100	100	100	
Indeterminate			19	21	24	
Total (Sample A) ^a /	11,393	0	10		22	
Total (Sample B)a/	8,810	4	15	18	22	
Total (Sample C) ^{a/}	7,031	4	16	19	23	

^{a/}Sample A includes all home-visited cases; Sample B excludes the sterilized or believes self sterile, those accepting before or on home visit, and the indeterminate cases; Sample C further excludes those not intending to accept because already using contraception.

* Less than 1 per cent.



Figure 5. Path Diagram of Factors Affecting 1965 Total Fertility in 78 Urban Areas

Note: The paths Rw, Rd, Ra, and Rt represent residual paths, which encompass all other influences on the variable in question. The expression (1-square of the residual path) gives the proportion of variance accounted for by the variables with direct paths to the variable in question.

* Path coefficient is less than twice the standard error of the Beta coefficient.

Source: Freedman and Takeshita, FP in Taiwan, 1969 Intention to accept among married women 20-39 not using satisfactory contraception: Taichung (Taiwan) experiment, c. 1963-66



Source: Freedman and Takeshita, FP in Taiwan, Table VIII-7

OASH Office of Population

September 2022

Title X Family Planning Annual Report 2021 National Summary



US Title X FP Reporting

Terms used
Family planning user
Family planning encounter
FP service provider
FP service site
Client records

Example of a Commodities-based Indicator

Where We Work ~



What We Do 🗸

Results and Data

Pa

Couple-Years of Protection (CYP)

Home > Global Health > Health Areas > Family Planning and Reproductive Health > Couple-Years of Protection (CYP)

Couple-Years of Protection (CYP) is the estimated protection provided by family planning (FP) methods during a one-year period, based upon the volume of all contraceptives sold or distributed free of charge to clients during that period. This includes permanent methods, such as sterilization, and the lactational amenorrhea method (LAM)

Examples

Method	CYP conversion factor
Sterilization	10 CYP per procedure
5-year implant	3.8 CYP per implant
Hormonal IUD	4.8 CYP per insertion
Depoprovera	0.25 CYP per does
Combined OC	0.0667 CYP per 28-pill pack
Emergency contraception	0.05 CYP per dose

https://www.usaid.gov/global-health/health-areas/family-planning/couple-years-protection-cyp



CONTRACEPTIVE SOCIAL MARKETING STATISTICS

DKT International publishes statistics for Contraceptive Social Marketing programs that report their sales data to DKT. These reports contain sales results from social marketing programs that generate 10,000 CYPs or more. To learn about CYPs and how DKT counts them, refer to our **Resources** page.

For Contraceptive Marketing Statistics sales data from 1991 to present in Excel format, download this file.

Q Contraceptive Social Marketing Statistics, 1991-Present

Θ



https://www.dktinternational.org/contraceptive-social-marketing-statistics/

In this half century of strong measurement of family planning demand...

•KAP surveys in the 1970s
•World Fertility Surveys 1972- 1984
•Contraceptive Prevalence Surveys 1978-1984

•Reproductive Health Surveys 1978-2016

•Young Adult Reproductive Health Surveys 1987-2002

•Demographic and Health Surveys 1984-

Other survey programs (MICS, PapChild)Periodic national surveys



Source: UN Methodoloogy Report, WCU 2022



As contraceptive prevalence increased, content focus for measurement shifted.



Knowledge- Supply-Demand Attitude-Practice (access, quality, ideation)

Unmet need and satisfied demand Reproductive empowerment

Role of conceptual frameworks

- Visualization of causal pathways
- Identify determinants and outcomes
- Enable measurement and operationalization
- Support hypothesis testing

The role of conceptual frameworks in driving measurement



Source: Lapham and Simmons, Organizing for Family Planning Effectiveness, 1987

2012 DHS revised definition of the unmet need for family planning indicator.

Unmet need for family planning framework and algorithm



Source: Based on Bradley and others (2012). Revising Unmet Need for Family Planning. DHS Analytical Studies No. 25, Calverton, Maryland: ICF International.

Unmet Need for Contraception

- KAP-GAP, originator concept
- Early framing by Westoff, revision by Bradley
- Demand satisfied as composite of mCPR/(CPR+Unmet Need)
- Exposure issues behind "Need" (Bradley and Casterline, 2014; Bell and Bishai, 2017)
 - Sexual activity
 - Fecundity
 - Marital status
 - Pregnancy and postpartum amenorrhea
- Demand For what? (Fabic, 2022)



Demand for fertility and contraception are multi-dimensional but not equivalent.

Fertility/Pregnancy	Demand for	Contraception/Abortion
Preferences Desired family size Ideal family size		Preferences Method features (mode of administration, user control, permanence)
Motivations Desire for (more) children	Fertility ≠	Motivations Sexual frequency Pregnancy avoidance
Intentions Timing Intensity	- Contraception	Intentions Intention to (continue) use
Satisfaction Happiness Value of children		Satisfaction Reasons for stopping Switching
Incidence Pregnancies/births		Incidence Adoption Duration of use (coverage/prevalence)

Contraceptive use dynamics

Micro-level dynamics belie modest change at aggregate level

Example: Burkina Faso PMA Longitudinal Surveys 2019-2022

CHANGE IN CONTRACEPTIVE METHOD TYPE Percent of women age 15-49 who changed contraceptive method or use status between PMA Phase 1 (December 2019-February 2020), PMA Phase 2 (December 2020 - March 2021), and PMA Phase 3 (December 2021-February 2022) (n=4 226) Phase 1 Phase 2 Phase 3 2,347 No Use No Use 70% 66% 65% 58 35 295 227 156 173 Tradition 86 65 Traditional 23 3% 54 3% Traditional 22 2% 4 Short-acting 11 Short-acting 17% 18 15% 13% 334 273 29 43 7 4 Long-acting Long-acting 48 Long-acting 15% 15% 15% 414 427

The ribbons of the Sankey represent the flow of women from one contraceptive use status to another among panel women who completed all three PMA Phases. The left side of the Sankey shows the flow between Phase 1 and Phase 2, and the right side between Phase 2 and Phase 3. The color of each ribbon represents the contraceptive use status at the initial Phase of the two Phases (e.g., a blue ribbon flowing from Phase 2 to Phase 3 represents women who were using a short-acting method at Phase 2). The N on each ribbon is the weighted number of women who went from the contraceptive use status at the initial Phase to the use status at the number of women represented.

Thinking forward with the past

"Basic model of factors determining additional fertility"



Source: Hermalin, Fertility Regulation and Its Costs, 1983

Subjective costs--Threats to:

Cultural norms

Nonconformity with religious and moral beliefs Social disapproval and fear of sanctions

Social adjustment

Disharmony in extended family Unconventional communication about sex between spouses Discord between spouses Undermining family status or security

Personal adjustment

Adoption of inner control or efficacy Change of selfperception and family role Loss of enjoyment of children Threat to sexual adjustment

Psychic threats to physical and mental health

Temporary discomfort

Fear of permanent damage to health

Fear of infant death

Shyness toward gynecological examination

Anxiety over contraceptive failure

Psychologistics Perceived accessibility of contraception











In sum,

Continuing importance of Conceptual frameworks (old and new) to guide measurement and validation Multi-disciplinary perspectives Indicator validation through different types of data (qualitative, longitudinal, dynamic, financial) and analyses

• Evidence-based consensus-building

Thank you.

If it's not measured, it's not monitored.

If it's not monitored, progress is unknown.

If progress is unknown, there is no accountability.