

## MCDB 150 Global Problems of Population Growth

### Lecture 13 Notes

Last lecture I gave you a pretty depressing picture of the future of the world's population and environment crisis.

Today I want to talk about the solution.

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Demographic and Health Surveys (DHS) BOLIVIA 2003

SLIDE 1

Here is actual fertility

SLIDE 2

In 1965-70 Bolivian women were having 6.6 children.

Then, in each succeeding 5 yr interval, they kept having fewer and fewer children.

The latest figures show that they are having 3.8 children.

Keep that 3.8 number in mind.

Bolivia is almost totally Catholic

- it is quite poor

- it's mostly agricultural

- it's not very urbanized

- education is at a fairly low level

- the status of women there is not a great, etc.

All of these are factors that might make you think that Bolivian families want a whole lot of children.

But in fact, fertility is moderate.

Fertility is high by our standards, It is still high enough to almost double population every generation,

But it is way down from a traditional 7 or 8 or 9 births.

How does this TFR of 3.8 accord with the desires of the Bolivians.

The DHS's ask about whether the children were wanted.

SLIDE 6

- Considering all births, 38% of the children were WANTED.

- Somewhat more were NOT WANTED 40%

- Hmm! More children are not wanted than are wanted.

- About 20% gave intermediate answers.

- No, the baby was not wanted now, but we probably would have wanted a baby in the future.

There's probably a bias in the above data, because mothers are reluctant to say that a baby they recently had was not wanted.

So that data probably overestimates the number of wanted children.

A way of avoiding that bias is to ask whether the woman wants another child.

So another DHS question asks whether the woman wants to have more children.

SLIDE 7

Very few women want to stop without any children

30% of those who have 1 child want to stop.

2/3 of women who have two children want to stop

83% of those who have 3 children want to stop

91-92% of women with 4 or more want to stop.

There is really no change from 4 & upward.

So ~8% of the women basically want as many children as they can have.

Altogether, 71% of the women want to stop childbearing now.

Almost all women want to stop at 3 or fewer children.

But the average they actually have is 3.8

The survey also asks directly How many children do you want?

SLIDE 9

If they have no living children		they want 2.1 children
If they have	1 living child	they want 2.1 children
If they have	2 living children	they want 2.4 children
If they have	3 living children	they want 2.7 children
If they have	4 living children	they want 2.8 children
If they have	5 living children	they want 2.9 children
If they have	6 or more living children	they want 3.3 children

There are several reasons for this rise:

1. If women want more children, they have more children
2. Women with more children are older, their fertility ideas are more old fashioned
3. Women who have already had a child don't want to say, I didn't want it.

But notice, no group of women wants more than 3.3 children.

Not even those who actually have 6 or more living children.

Yet, all together their TFR is 3.8 – the number I told you to remember from the 1<sup>st</sup> graph.

So: women are having significantly more children than they want.

### THAT IS A VERY IMPORTANT FACT

An economist at the World Bank, Lant Pritchett, collected this DHS data from from all the developing countries for which there was data.

From his collection, we can tell how generalizable this mismatch was.

From slide 9, You cannot determine an average number of wanted children from this data.

To do that, you would have to know how many women were in each of the 'number of living children category'. This data is available.

Pritchett took data from the different DHS questions and used them to construct various composite measures of what the average number of desired children was. Each of these measures avoids some biases, but has other imperfections.

Pritchett a, b SLIDE 12

But however he did it, the data looked pretty much the same.

The points lie very close to a straight line.

When people want more children, they have more children.

A very tight linkage between the number of children women want and the number they actually have.

The statistic that is generally considered the best is called

The Wanted Total Fertility Rate

Pritchett c SLIDE 13

Now I have added in another line.

Pritchett c add 45 deg line SLIDE 14

If women were having exactly the number of children that they wanted, all points would lie on this line.

But, in fact, every country lies ABOVE this line.

People are having more children than they want.

The excess is ~1 child per family.

This gap is called "unmet need".

This data is somewhat old now.

It was published in 1994, so it is mostly from surveys carried out in the 1980s.

Since then, fertility has fallen dramatically – and desired fertility has fallen along with it.

It seems that countries slide down along this line.

It's not clear if the two lines approach each other.

In any case, from recent data, like the Bolivia data I showed you,

The gap between desired and actual childbearing is still quite substantial.

The TFR of the developing countries is ~3.5 (RW calc from 2008 World Pop Data Sheet = 3.44 excl China). That's 1.5 children more than replacement level.

Assuming that the gap is still ~ 1child,

Then, if everyone actually had the number of children that they want, the developing countries would come down to ~2.5 children, that's very close to replacement level.

So this gap is extraordinarily important.

One version of what groups like Planned Parenthood do is to help people have the # of children that they want.

In fact, Planned Parenthoods motto is "Every Child a Wanted Child"

So here are a whole bunch of questions.

Does this data actually reflect people's desires?

Remember your reading about women to whom the question

"How Many Children" do you want was just meaningless.

They all knew it was God's Will that determined that.

This data is all collected from women.

Do men want more children?

Is it really men's desires that matter?

Why do women in Yemen or Kenya want 8 or 9 children (at the time this data was collected), while women in Thailand or Sri Lanka want only 2 or 3?

In most of the world people know about contraceptives

SLIDE 16

And mostly contraceptives are available free or at low cost.

So, why are people in developing countries having more children than they want?

If you are an activist, you want to know how to help people get the number of children that they want.

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