

International Multidisciplinary
Research Journal

*Indian Streams
Research Journal*

Executive Editor
Ashok Yakkaldevi

Editor-in-Chief
H.N.Jagtap

Indian Streams Research Journal is a multidisciplinary research journal, published monthly in English, Hindi & Marathi Language. All research papers submitted to the journal will be double - blind peer reviewed referred by members of the editorial board. Readers will include investigator in universities, research institutes government and industry with research interest in the general subjects.

Regional Editor

Dr. T. Manichander

Mr. Dikonda Govardhan Krushanahari
Professor and Researcher ,
Rayat shikshan sanstha's, Rajarshi Chhatrapati Shahu College, Kolhapur.

International Advisory Board

Kamani Perera Regional Center For Strategic Studies, Sri Lanka	Mohammad Hailat Dept. of Mathematical Sciences, University of South Carolina Aiken	Hasan Baktir English Language and Literature Department, Kayseri
Janaki Sinnasamy Librarian, University of Malaya	Abdullah Sabbagh Engineering Studies, Sydney	Ghayoor Abbas Chotana Dept of Chemistry, Lahore University of Management Sciences[PK]
Romona Mihaila Spiru Haret University, Romania	Ecaterina Patrascu Spiru Haret University, Bucharest	Anna Maria Constantinovici AL. I. Cuza University, Romania
Delia Serbescu Spiru Haret University, Bucharest, Romania	Loredana Bosca Spiru Haret University, Romania	Ilie Pinteau, Spiru Haret University, Romania
Anurag Misra DBS College, Kanpur	Fabricio Moraes de Almeida Federal University of Rondonia, Brazil	Xiaohua Yang PhD, USA
Titus PopPhD, Partium Christian University, Oradea,Romania	George - Calin SERITAN Faculty of Philosophy and Socio-Political Sciences Al. I. Cuza University, IasiMore

Editorial Board

Pratap Vyamktrao Naikwade ASP College Devrukh,Ratnagiri,MS India	Iresh Swami Ex - VC. Solapur University, Solapur	Rajendra Shendge Director, B.C.U.D. Solapur University, Solapur
R. R. Patil Head Geology Department Solapur University,Solapur	N.S. Dhaygude Ex. Prin. Dayanand College, Solapur	R. R. Yallickar Director Managment Institute, Solapur
Rama Bhosale Prin. and Jt. Director Higher Education, Panvel	Narendra Kadu Jt. Director Higher Education, Pune	Umesh Rajderkar Head Humanities & Social Science YCMOU,Nashik
Salve R. N. Department of Sociology, Shivaji University,Kolhapur	K. M. Bhandarkar Praful Patel College of Education, Gondia	S. R. Pandya Head Education Dept. Mumbai University, Mumbai
Govind P. Shinde Bharati Vidyapeeth School of Distance Education Center, Navi Mumbai	Sonal Singh Vikram University, Ujjain	Alka Darshan Shrivastava Shaskiya Snatkottar Mahavidyalaya, Dhar
Chakane Sanjay Dnyaneshwar Arts, Science & Commerce College, Indapur, Pune	G. P. Patankar S. D. M. Degree College, Honavar, Karnataka	Rahul Shriram Sudke Devi Ahilya Vishwavidyalaya, Indore
Awadhesh Kumar Shirotiya Secretary,Play India Play,Meerut(U.P.)	Maj. S. Bakhtiar Choudhary Director,Hyderabad AP India.	S.KANNAN Annamalai University,TN
	S.Parvathi Devi Ph.D.-University of Allahabad	Satish Kumar Kalhotra Maulana Azad National Urdu University
	Sonal Singh, Vikram University, Ujjain	



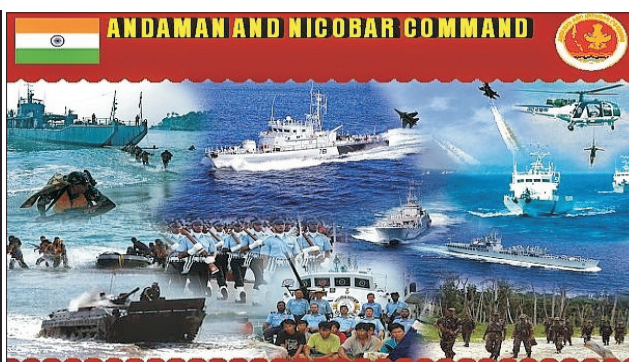
A CASE STUDY ON DEMAND AND SUPPLY OF ANC SERVICES IN ANDAMAN ISLANDS

Anita Banerje

Assistant Professor , Mahatma Gandhi Govt., College Mayabunder,
Andaman and Nicobar Islands.

ABSTRACT

The present study at a micro level attempts to establish a link between demand and supply of Antenatal services in a Panchayat in Andaman Islands. The trend reflects that though there has been an increase in the cases registered for ANC services, yet there is an absence of symmetry between the cases registered and those who have availed three check-ups. The reason being, that the pregnant women in general are unable to distinguish the difference between "need" and "demand". They fail to understand the need for ANC services, which is more normative in nature to prevent any negative impact on the mother and unborn child. Instead most of them demand these services only when they feel discomfort. Therefore a more paternalistic approach, along with the involvement of



people is needed.

KEYWORDS: Antenatal, Panchayat, need, demand.

INTRODUCTION:

It is often said that health is wealth more so when a female is on the family way. It is the stage when a 'would be' mother requires proper medical monitoring and checkups to ensure that she gives birth to a healthy child. Health broadly defined in terms of health economics is not just absence or presence of illness. It concerns the general wellbeing. It is also related to the function of maintaining the general physical and mental well being of the general public and

which include clinical examination, blood testing etc. Women's use of antenatal care has also been part of millennium Development Goal #5.

OBJECTIVES OF THE STUDY

In terms of health economics the study attempts to examine a relationship between demand for ANC services and supply for the same. Demand for health care is a complex good. One reason that can be attributed to its complexity and therefore uncertainty is that occurrence of a disease cannot be predicted adequately. Apart from the reason cited, there is another characteristics associated with the demand for "health care" (which is a "good" in the sense of Economics terminology) which is distinct from the demand for other goods normally demanded. Health care is not demanded for

itself it is rather sought as an alternative to discomfort or illness. Therefore the main objectives are:

1. The present study seeks to find out the constraints on the demand side for health care.
2. Secondly to study the supply side constraints
3. To evaluate the trends in the number of prenatal care cases registered over a 9 year period.

It is normally observed that with advent of globalization we are fast moving towards privatization. But there is one domain where the state still plays a vital role. That field happens to be the provision of medical care. Though the area covered by the state health services is quite extensive. The scope of the study is confined to provision of Antenatal services in the islands.

What is Antenatal Care and why is it important?

Proper care during pregnancy is important for the health of the mother and the development of the unborn baby. Pregnancy is a crucial time to promote healthy behaviors and parenting skills. Proper ANC links the woman and her family with the formal health system, increases the chance of using a skilled attendant at birth and contributes to good health through the life cycle. Inadequate care during this time breaks a critical link in the continuum of care, and affects both women and babies. A study under the aegis of UN has also observed that developing countries particularly, Africa and India suffer from a number of communicable diseases and also from maternal and prenatal problems. The approach towards ANC has now undergone a modification. Previously pregnant women were classified as “high risk” and “low risk” based on certain predetermined criteria and involved many ANC visits. It was difficult to classify women into high and low risk, since a woman had at least one high risk factor. Hence the new approach adopted by WHO is a more focused or goal oriented ANC service.

STATUS OF PRENATAL CARE IN THE WORLD

A number of studies undertaken reveal clearly the positive outcomes of prenatal care on various aspects such as mothers’ health, weight of the child at birth among other positive results. Julia C. Phillips in her study³ found that women reported many barriers to accessing prenatal care. The barriers include social, maternal and structural dimensions. Women may not be motivated to seek prenatal care because of lack of motivation, as also in case of unintended pregnancies. Structural barriers cited are long hours of waiting, cost of service, language and attitude of the clinical staff etc. In yet another study carried out by Eric Arthur (2009)⁴ focuses on the fact that apart from factors such as age, number of children, wealth also has significant implications on ANC services. Similarly a study by Japheth Osotsi; Awiti,⁵ in a multilevel analysis of prenatal care and birth weight in Kenya came to the conclusion that adequate use of prenatal care services , increases the birth weight of the child holding other factors constant.

PRENATAL SERVICES IN INDIA

Under National Rural Health Mission initiated by the govt. of India a program of Reproductive and Child Health under which tracking of pregnant mothers has been recognized as a priority area for providing effective health care services. A major initiative, a system of name based tracking of pregnant women and children for antenatal care and immunization has been introduced at the national level. 1.18 Crore pregnant women have been registered at the national level (Govt., of India, Ministry of Family Health and Welfare Dec., 2011). Efforts have undertaken by government of India towards improving the health of people in recent years, particularly the issue of child and women’s overall health through its various program interventions such as NRHM which covers under its umbrella initiatives like Janani Suraksha Yojana besides others. This has lead to increase in the percentage of institutional deliveries. There have been studies on ANC services undertaken in various parts of India. In one such study by Bhattacharya R. and Tandon J. 1991⁶ points out the managerial gaps in the delivery of antenatal services in rural Varanasi. In a study of antenatal services in rural Lucknow, Uttar Pradesh It was found that at least 85% of the beneficiaries received a minimum of three antenatal care services from any health facility. A study of “socio-economic disparity in care seeking behavior for antenatal care.....” Renu Shahrawat

et.al. 2014⁷ came to the conclusion that socio economic disparities influence the antenatal care seeking behavior of pregnant women.

HEALTH CARE SCENARIO IN ANDAMAN AND NICOBAR

This union territory is situated 150 km north of Aceh in Indonesia and separated from Thailand and Myanmar by Andaman Sea. Andaman and Nicobar Islands a Union Territory of India has a population of 379,944 of which 53.25% are male and 46.75% are female (census 2011). The sex ratio is 878 as compared to 940 at the national level. Studies on female health care are not very focused. The health infrastructure of the Union territory is described below in the table

Table 1: Health infrastructure in Andaman Islands as per Family Welfare statics -2011

No. of Sub-centers	PHC	Urban Heath Centre	CHC	Hospital
122	22	05	04	04

The table above shows the number of sub-centers which is 122; total number of primary Health centre which is 22 and the number of Community health centre is 4. In addition there are 5 numbers of urban health centers and a total of 4 hospitals.

The Present Study

The present micro level study is confined to the 4 sub -centers covered under the Mayabunder Tehsil of North and Middle Andaman district. Mayabunder also happens to be the district head quarters. To present a brief overview of the administrative divisions of these picturesque islands - the islands of Andaman and Nicobar are divided into three districts namely North and Middle Andaman, South Andaman and Nicobar districts. The N&M district ranks 614 out of total 640 districts in India. It has a population of 105,539. This district was created on 18th August 2006 by bifurcating the erstwhile Andaman district. The area covered by the district is 3251.85 kmsq. The district is divided into three Tehsil namely Mayabunder, Diglipur and Rangat. Andaman Islands being a union territory and due to its location disadvantage (situated far away from mainland) are also gifted with a number of services directly sponsored by the state. One such service among others is the provision of Antenatal services.

METHODOLOGY

For the purpose of study published sources was utilized as well as reports from four sub-centers under Rampur Panchayat under Mayabunder Tehsil were collected for time series analysis. Thus, use of both primary and secondary data was made for the purpose of present study. Reports collected from the sub-centers covered a period from 2007 to 2015. Besides a structured questionnaire was also used to elicit information related to availing or other wise of the services.

The table 2 below shows the picture of entire Andaman Islands with respect to the cases registered under ANC. At first if we look at the number of cases registered since 2006 to 2011 there does not seem to be a persistent rise in the number of cases registered. The year 2008-09 witnessed the largest number of registration; thereafter there was a steady decline in the cases registered for availing the antenatal services provided free of costs to the pregnant women. Besides as is evident from the table there is absence of sync between the number of women who were registered under ANC services and those who underwent minimum three check-ups. During the period 2006-07 number of pregnant women registered was 6,274 whereas the number of women who underwent three check –ups were found to be more (6,357). In the subsequent years women who underwent check-ups (minimum three) were less in number compared to those registered for ANC. This clearly establishes a gap between demand and supply. Thus, pointing towards the fact that there is a constraint on the demand for ANC services. This in the context of Health Economics could be attributed to the inability to distinguish the difference between “need” and “demand”. Health care is not demanded for itself it is rather

sought as an alternative to discomfort or illness. Therefore in the present case provision of Antenatal services free of cost, there seems to be a gap in the demand for the same simply because the need for antenatal services is not felt by the women in general, basically for two reasons. First, there is a virtual “medical ignorance” of patients and the second reason being that demand for health services is uncertain; it is sought only when confronted with illness and discomfort, not as a preventive measure.

Table2: Information Related to Maternal Health in Andaman Islands

Year	Total ANC Registered	With 3 check ups
2006-07	6,274	6,357
2007-08	6,558	6,091
2008-09	7,199	-
2009-10	5,715	5,143
2010-11	2,782	2,186

Source: Family Welfare statistics 2011

The Share of the Health Sector in Total Plan Expenditure of Andaman & Nicobar Islands is indicated below

Table 3: Investment in Health Sector

Year	Total Plan Exp. on UT	Exp. On Medical Sector(Plan)	% of Exp. On Medical Sector
2002-03	40089.66	2119.72	5.29
2003-04	40587.82	2312.26	5.70
2004-05	40241.60	2368.95	5.89
2005-06	48534.00	2832.22	5.84
2006-07	51727.55	3665.41	7.09
2007-08	59368.53	3870.51	6.52

Source: Report from DHS, A & N Islands

The expenditure of this Union Territory on Medical sector shows that there has been a consistent increase in percentage terms in the allocation of funds towards improving and providing the basic health services.

For the present study Rampur Panchayat of Mayabunder Tehsil was purposely chosen to find the trend in the number of women registered for ANC from 2007 onwards. There are four villages (Rampur, Karmatang, Lucknow and Webi) of Rampur Panchayat which have a combined population of 5, 164. Data was collected from the four sub-centers regarding the total number of case registered under ANC. The survey revealed that though health workers on their part were making best possible effort towards enlightening the patients towards the need for getting registered and going for subsequent checkups the response was not very positive. The perception of the patients as observed from their responses was that they were unable to distinguish between the “need” and “demand” for ANC services. The “need” may be categorized as normative to make sure that the patient does not face any kind of complications at later stage of pregnancy which is vital both for the mother and the unborn child. Demand in this case was felt only in case of discomfort associated with pregnancy not otherwise. Trend based on Time series was calculated.

The trend line $Y = a + bx$, $a = 59.33$ $b = 1.41$

Table 4: Trend in ANC services in Rampur Panchayat

Year	ANC cases registered	X	X ²	XY	Trend
2007	35	-4	16	-140	53.69
2008	63	-3	9	-189	55.1
2009	35	-2	4	-70	56.51
2010	66	-1	1	-66	58.19
2011	95	0	0	0	59.33
2012	62	1	1	62	60.47
2013	79	2	4	158	62.15
2014	66	3	9	198	63.56
2015	33	4	16	132	64.97
Total	534		60	85	

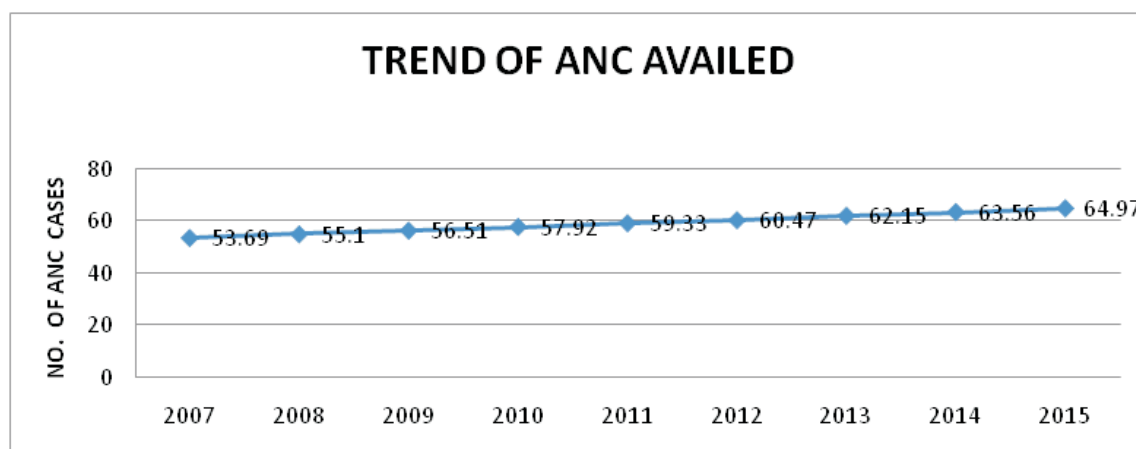
Source: Records of the sub- centres

The results show that there has been an increase in the cases registered under ANC though not considerable. The trend line shows that the cases registered under ANC is increasing but not in a remarkable manner. Further, among the cases registered not all women went for the 3 minimum check-ups mandated. The pattern in Rampur Panchayat is more or less similar to the overall pattern in the matter of check-ups for the entire Andaman Islands (see Table2). There does not seem to be a consistency in going in for regular checkups. The reason attributed as learnt through survey, for the said behaviour is lack of awareness about the need of care and check- ups during pregnancy. Another reason cited was that women usually shift to their maternal homes prior to delivery. Some pregnant women were actually reported to be travelling to relatives and other places during the initial period of pregnancy when check-ups are essential. All in all, what comes to the fore is the lackadaisical attitude of most women towards health care at this juncture when it is most important. But what is more significant in the behavioral pattern is that though the services are being provided by the govt. (supply of the ANC services is by the Govt.) yet the demand by the consumers (Patients) is fickle and not precisely in agreement with the services offered. That is demand for the services is induced only due to inconvenience caused during pregnancy. That is demand is not based on priority basis but only when a discomfort is felt. It is here that policy intervention (supply side) of the “Paternalistic” rather “soft paternalist” nature is required. This concept and practice of paternalism doesn’t focus on the person as such, but tries to point out the risk associated with not following the precautions, of exposing themselves to risks of serious nature, that is where the state intervenes with the person’s behaviour for his or her own good is needed. While conventional Economics rule out such behaviour as it is based on rational choice of the consumer.

Table 5: Cases registered with 3- check-ups in Rampur Panchayat

Year	ANC cases Registered	With 3 check-ups
2007	35	30
2008	63	68
2009	35	34
2010	66	20
2011	95	58
2012	62	60
2013	79	75
2014	66	40
2015	33	32
Total	534	417

Source: Records of the sub- centres



CONCLUSION

The findings suggest that there has been increase in the cases registered but not to a significant level. The percentage increase over the years has been by at the most 2%. Similarly there seems to be lack of consistency among those registered for ANC services and those availing them in the form of three check-ups in the first instance. Thus in order to make the supply of health care services (In this case ANC, services) efforts has to be stepped up by adopting a more paternalistic approach. A rigorous sensitization program is needed. Providing education may help people in general to be aware and enlightened towards many issues, but in the context of health care (antenatal checkups) education is not the sole factor influencing their decision. Govt. of our country is spending a substantial amount through various programs such as NRHM, as well as various schemes. In order to ensure the success of its efforts more focused interventionist policies are needed. Though, Andaman recorded the lowest of IMR of 10 better than Brazil and same as China and Bulgaria according to WHO (As revealed by NFHS 2015-16 survey). Involvement and cooperation of people is also needed. Given the small size of the population, a little more concerted effort can well go a long way in achieving cent percent success.

REFERENCES

1. Mabel Bianco, www.un.org.
2. Adeniyi Francis, Erhabor Sunday Idemudia Barriers to antenatal care services in Nigeria: Evidences from non users and implications for maternal health programming, Research article BMC pregnancy and child birth, December 2015, 15:95(available from Springer link)
3. Julia C. Phillips Women's perception of Access to Prenatal Care in the United States: A Literature Review in J of Midwifery Women's Health, 2009
4. Eric Arthur Demand for Prenatal Care in South America Applied Economics 41(4) Feb- 2009
5. Japheth Osotsi; Awiti A multilevel analysis of prenatal care and birth weight in Kenya Health Econ Rev. 2014; 4: 33.
6. Bhattacharya R and Tandon J, Managerial Gaps in Delivery of Antenatal Services in Rural areas of Varanasi Indian journal of Public Health, Vol .35, 1991
7. Renu Shehrawat et. al, Socio-Economic disparities in Care- Seeking Behaviour for Antenatal Care and Pregnancy Complications among Indian Women, 2014 Health and Population-Perspectives and Issues



Anita Banerje

**Assistant Professor , Mahatma Gandhi Govt., College Mayabunder,
Andaman and Nicobar Islands.**

Publish Research Article

International Level Multidisciplinary Research Journal

For All Subjects

Dear Sir/Mam,

We invite unpublished Research Paper, Summary of Research Project, Theses, Books and Book Review for publication, you will be pleased to know that our journals are

Associated and Indexed, India

- ★ International Scientific Journal Consortium
- ★ OPEN J-GATE

Associated and Indexed, USA

- Google Scholar
- EBSCO
- DOAJ
- Index Copernicus
- Publication Index
- Academic Journal Database
- Contemporary Research Index
- Academic Paper Database
- Digital Journals Database
- Current Index to Scholarly Journals
- Elite Scientific Journal Archive
- Directory Of Academic Resources
- Scholar Journal Index
- Recent Science Index
- Scientific Resources Database
- Directory Of Research Journal Indexing

Indian Streams Research Journal
258/34 Raviwar Peth Solapur-413005, Maharashtra
Contact-9595359435
E-Mail-ayisrj@yahoo.in/ayisrj2011@gmail.com
Website : www.isrj.org