

Is There A Huge Research Gap In Indian Public Health System? A Review On Published Articles Related To National Health Programmes, In The Pubmed Indexed Journals.

Running Title: Research Gap in Indian Public Health System

Newtonraj A

Assistant Professor, Department of Community Medicine, Pondicherry Institute of Medical Sciences, Puducherry.

Email: newton2203@gmail.com

Abstract:

Background: Public health system in India has many national health programmes. Research is largely driven with the donor agencies, which may not have linkage to the actual needs of the programmes. *Objectives:* to understand the research gap in Indian Public Health System with respect to the National Health Programs. *Methodology:* Top ten national health programmes were selected based on the expert's programmes. Pubmed search was made for the past five years using keywords as the name of the health programme or its abbreviation. *Results:* Among the total 1053 line listed articles, only 304 articles have been included after a careful reading of title and abstract. Important key findings in our study are more than half (58%) of the researches are published in RNTCP (Revised National Tuberculosis Control Programme) followed by JSY (Janani Sureksha Yojana Scheme) which is 13%. Other national health programmes have very fewer publications including an important health programme, NACP (National AIDS Control Programme). *Conclusion:* There is a huge disparity in the number of published researches among each selected important national health programmes. There is a need to set up an operational research committee in each state to promote research.

Keywords: Health account diary, community participation, gaps in health care delivery

1. Introduction

India is second most populated country in the world.[1] Many of its states are having population more than most other independent countries in the world.[2] To tackle the problem of disease burden, there are more than thirty national health programmes

(NHPs) operational in India.[3] Most of these programmes have evolved over time. At present public health system is mainly run by government machinery. International organizations like World Health Organizations, UNICEF(United Nations International

Children's Emergency Fund) and few Non-Government Organizations (NGOs) like the Tuberculosis Association of India (TAI) are working in different domains with the public health system to assist in running these programmes. The type of support offered by the different private organizations to the public health system may vary according to their objective. For the better and optimal performance of NHPs, implementation research needs to be promoted. Here, all the stakeholders including the public health machinery, government and private medical education & research institutes and NGOs have to work in tandem, without which research in the public health programmes may not have its desired impact. There might be many indicators to capture extent of researches that could have informed these programmes. We consider the number of publications pertaining to that particular programme in the Pubmed indexed journals would be one of the better indicators to know the research involved in these public health programmes. So we aimed to study the number of researches

published in Pubmed on important selected public health programmes through a review.

2. Methods

National health programmes in India were line listed from National Health Portal.[3] Among these, ten health programmes were included in the study based on experts opinion. Two experts have independently ranked the programmes first and the conflicts in the ranking were resolved based on the discussion with a third expert. The experts were with a minimum qualification of MBBS, MD (Community Medicine) and the experience of minimum three years in this field. Among the listed programmes only those programmes which have been implemented seven or more years were selected. Selected programme names are given in table 1.

List of national health programmes, year of implementation and the number of publications from each programme for the past five years from the date of search (28/10/2018) in PUBMED.

| S. No | Selected National Health Programmes | Year of implementation | Include d N= 304 n (%) | Exclu ded |
|-------|---|------------------------|------------------------------|-----------|
| 1. | Revised National Tuberculosis Control Programme | 1993 | 176 (58) | 1 |
| 2. | Janani Suraksha Yojana | 2005 | 39 (13) | 0 |
| 3. | National AIDS Control Programme | 1992 | 24 (08) | 79 |
| 4. | National Vector Borne Disease Control Programme | 2003 | 20 (07) | 0 |
| 5. | National Leprosy Eradication Programme | 1983 | 16 (05) | 0 |
| 6. | Integrated Disease Surveillance Programme | 2004 | 12 (04) | 0 |
| 7. | Janani Shishu Suraksha Karyakaram | 2011 | 7 (02) | 4 |
| 8. | National Tobacco Control Programme | 2007 | 4 (01) | 653 |
| 9. | National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke | 2010 | 3 (01) | 0 |
| 10. | National Programme for Control of Blindness | 1976 | 3 (01) | 12 |

After selection of important ten health programmes, studies related to these programmes were searched in Pubmed electronic library. Search criteria

were the full name of the programme and/or abbreviation of that particular programme in the title and/or in the abstract (Box I).

Keywords for each programme in the past five years from the date of search (28/10/2018) in PUBMED.

| |
|---|
| “Revised National Tuberculosis Control Programme” [tiab] OR RNTCP[tiab] |
| “National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke” [tiab] OR NPCDCS[tiab] |
| “Janani Suraksha Yojana” [tiab] OR JSY[tiab] |
| “Janani Shishu Suraksha Karyakaram” [tiab] OR JSSK[tiab] |
| “National AIDS Control Programme” [tiab] OR NACP[tiab] |
| “National Leprosy Eradication Programme” [tiab] OR NLEP[tiab] |
| “Integrated Disease Surveillance Programme” [tiab] OR IDSP[tiab] |
| “National Vector Borne Disease Control Programme” [tiab] OR NVBDCP[tiab] |
| “National Tobacco Control Programme” [tiab] OR NTCP[tiab] |
| “National Programme for Control of Blindness” [tiab] OR NPCB[tiab] |

Publications for the past five years were included. After search, the results were saved in the Pubmed library for further sorting and reference. Only Pubmed indexed journal were included in the study, considering the quality of the research and to avoid predator journals. Case studies, as well as studies not related to the programme, were excluded after careful examination of title and abstract. The number of studies published in the Pubmed library with respect to each programme was taken as the outcome of interest.

3. Results

Among the total of 1053 publications listed with the keywords, a total of 304 publications have been included after exclusion of 749 unrelated publications. The number of publications against each national health programmes presented in the table I. Among the ten NHPs RNTCP

(Revised National Tuberculosis Control Programme) holds the highest publications (n=176 (58%)), rest of the 42% contributed by all the other programmes. Surprisingly NTCP(National Tobacco Control Programme), NPCB(National Programme for Control of Blindness) and NPCDCS(National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular diseases and Stroke) holds the least number of publications n=4(1%), n=3(1%) and n=3(1%) respectively.

4. Discussion

To our knowledge after an extensive search, we couldn't able to find any article discussing the number of published researches in each national health programmes in India. This is the first initiative to study researches in health programmes. Limitation of this study is, we couldn't include all the national health programmes. In

this article we assumed that all these programmes are equally important but in real scenario the government support, budget and NGOs support would differ between each programmes. Strength of this article is by a simple search in pubmed we were able to identify the programmes supported through research.

Important key findings in our study are more than half (58%) of the researches are published in RNTCP followed by JSY (Janani Sureksha Yojana Scheme) which is 13%.[4–8] Other national health programmes had fewer publications, including an important health programme, NACP (National AIDS Control Programme).[9–11] One of the reasons why RNTCP's performance is outstanding, may be because RNTCP has a strong administrative divisions including a division in promotion of research, which is known as RNTCP OR (operational research committee). RNTCP OR committee of each states includes researchers and administrative officers from RNTCP public health, private and government medical colleges which enables and encourages the research in RNTCP programme.[12, 13] Whereas other programmes in India don't have such an administrative division as well as public-private partnership in terms of research. In general, the data from the public health system lies as the base for research. On the other hand researchers are either from private or government medical colleges or from NGOs.[12, 13] Getting data from the public health system in other programmes, other than RNTCP depends on the decision of the director of that particular programme which is usually subjective and there is no clear-cut guideline. This makes the researchers concentrate more on the RNTCP rather than other programmes in this country. Through this study we

strongly recommend to set up an operational research committee under the chairmanship of Director of health in each state to promote operational and implementation research in that particular state.

A way forward in future research in this topic would be studying in detail, the researches happened in each individual national health programmes.

5. Conclusion

To conclude, we find a huge disparity in the number of researches published under each national health programmes in India.

6. References

1. Office of the registrar general & census commissioner I. Census Info India 2011. <http://censusindia.gov.in/>. Accessed 31 Oct 2018.
2. Dandona L, Dandona R, Kumar GA, Shukla DK, Paul VK, Balakrishnan K, et al. Nations within a nation: variations in epidemiological transition across the states of India, 1990–2016 in the Global Burden of Disease Study. *Lancet*. 2017;390:2437–60. doi:10.1016/S0140-6736(17)32804-0.
3. National Health Portal - India. Health Programmes/Wellness in India. <https://www.nhp.gov.in/healthprogramme/national-health-programmes>. Accessed 21 Oct 2018.
4. Muniyandi M, Rao VG, Bhat J, Yadav R. Performance of Revised National Tuberculosis Control Programme (RNTCP) in tribal areas in India. *Indian J Med Res*. 2015;141:624–9. <http://www.ncbi.nlm.nih.gov/pubm>

- [ed/26139780. Accessed 4 Nov 2018.](#)
5. Randive B, Diwan V, De Costa A. India's Conditional Cash Transfer Programme (the JSY) to Promote Institutional Birth: Is There an Association between Institutional Birth Proportion and Maternal Mortality? *PLoS One*. 2013;8:e67452. doi:10.1371/journal.pone.0067452.
 6. Chaturvedi S, Upadhyay S, De Costa A. Competence of birth attendants at providing emergency obstetric care under India's JSY conditional cash transfer program for institutional delivery: an assessment using case vignettes in Madhya Pradesh province. *BMC Pregnancy Childbirth*. 2014;14:174. doi:10.1186/1471-2393-14-174.
 7. Sharma MP, Soni SC, Bhattacharya M, Datta U, Gupta S, Nandan D. An assessment of institutional deliveries under JSY at different levels of health care in Jaipur District, Rajasthan. *Indian J Public Health*. 53:177–82. <http://www.ncbi.nlm.nih.gov/pubmed/20108884>. Accessed 4 Nov 2018.
 8. Guin G, Sahu B, Khare S, Kavishwar A. Trends in Maternal Mortality and Impact of Janani Suraksha Yojana (JSY) on Maternal Mortality Ratio in a Tertiary Referral Hospital. *J Obstet Gynaecol India*. 2012;62:307–11. doi:10.1007/s13224-012-0221-1.
 9. Agarwal R, Rewari BB, Shastri S, Nagaraja SB, Rathore AS. Delivery of antiretroviral treatment services in India: Estimated costs incurred under the National AIDS Control Programme. *WHO South-East Asia J public Heal*. 2017;6:94–8. doi:10.4103/2224-3151.206172.
 10. Lal S. National AIDS control programme and generation of awareness in medical profession. *J Indian Med Assoc*. 1993;91:309. <http://www.ncbi.nlm.nih.gov/pubmed/8158006>. Accessed 4 Nov 2018.
 11. Rao KS. Towards containing HIV/AIDS epidemic in India: policies and priorities under National AIDS Control Programme Phase-III (2007-12). *J Indian Med Assoc*. 2009;107:274–5. <http://www.ncbi.nlm.nih.gov/pubmed/19886380>. Accessed 4 Nov 2018.
 12. Sharma SK, Mohan A, Chauhan LS, Narain JP, Kumar P, Behera D, et al. Contribution of medical colleges to tuberculosis control in India under the Revised National Tuberculosis Control Programme (RNTCP): lessons learnt & challenges ahead. *Indian J Med Res*. 2013;137:283–94. <http://www.ncbi.nlm.nih.gov/pubmed/23563371>. Accessed 4 Nov 2018.
 13. Tonsing J, Mandal PP. Medical colleges' involvement in the RNTCP: current status. *J Indian Med Assoc*. 2003;101:164–6. <http://www.ncbi.nlm.nih.gov/pubmed/14603965>. Accessed 4 Nov 2018.