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Review Article

Explore the Role of Homoeopathy in Maternal Health Care Practices in UP and India

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Abstract

On 13th December 1986, the famous actor of Indian cinema Mrs. Smita Patil died of child birth complications technically known as puerperal sepsis (HT, 13th Dec, 1986). 36 years later, in 2022, Dr. Archana of Dausa, Rajasthan died by suicide as she was arrested after a pregnant woman died of Post Partum Haemorrhage (PPH) in her private hospital (TNN. March 30th 2022). This clearly reflects the challenge that maternal health throws at the health fraternity. A woman's struggle in the stage of pregnancy is full of turbulents. The struggle of mothers continues in India even today and that too in the state of UP even on a large scale. The current Maternal Mortality Ratio in India is 103 per 10000 live births & for the state of UP, it is 167 (SRS, 2019). Similarly, the Maternal Mortality Rate of India is 6.5 per 100,000 pregnant women in the age group of 15-49 years where as in UP, it is 14.7 per 100,000 pregnant women in the age group of 15-49 years. The high Maternal Mortality both in India and UP stand as a testimony to this fact as reducing this indicator is a priority. The target of achieving the SDG target of 70 per one lakh live births is a long way. The current article focuses on the initiatives of the role of homoeopathy in public health system to address maternal mortality. Basically, there are three approaches to reduce maternal mortality. These are addressing the three crucial delays related to the maternal mortality. The article focuses exclusively on these approaches while relating to homoeopathy. There are three objectives of the article. The first is to find out the current status of Homoeopathy in the maternal health practices, the second is to find out the details of the current & past implementation strategies in the homoeopathic context and the third is to find out the link between Homoeopathy & maternal health practices. The study uses secondary data. The gap that the article worked on is to explore a link between Homoeopathy & maternal health & its modalities. It deciphers whether there is a functional link currently or not & suggests future strategies based on the functionality of the link. It will be a step in the right direction to fulfill the plans to achieve the maternal health target of SDG by 2030 especially for maternal mortality related goals. For the benefit of the readers, the article includes its expected outcome, relevance to society & policy making through the context of the identified issues & the research gap. Through all these sections, the current article puts an effort to fulfill the three cited objectives of the current study related to incorporation of homoeopathy in maternal care.

Keywords: MDR, SAS, JSY, JSSK, Miasm, MMR, Obstetric.

INTRODUCTION

In this section, the historical perspective of maternal health care is discussed in the beginning thereby progressing to the current status in India and in UP. Box number 1 shows the time line of maternal health care in India at a glance.

Box number 1

1900- Maternal & Child Welfare Bureau of Indian Red Cross Society initiated maternal health as voluntary work
1931- Maternal Welfare Section initiated in the director of health services in Madras state
1946- Bhore committee recommended integration of maternal health in to general health services.
1946-1954- Maternal health run unevenly by through maternity homes & midwives.
1955- Maternal health integrated to general health services
1955-1962- WHO & UNICEF supported expansion of maternal health services.
1962- Mudaliar committee recommended 1 ANM per 10,000 population in maternal health centers.
1968- Integration of family planning into maternal health.
1969-1974- Integration of family planning into maternal health in the first five year plan.
1978- Alma Ata conference talked of maternal health in primary care at global level.
1983- First National Health Policy talked of maternal health in detail.
1983-2000- Health For All slogan included maternal health
2000-2015- Maternal health as a goal in Millenium Development Goals (MDG)-5
2005- Maternal health as a component of NRHM.
2015-2030- Maternal health as a sub goal of goal #3 of Sustainable Development Goals (SDG).

The current article is in the area of maternal health which is a part of Reproductive & Child Health program. Hence, imperatively tracing the history of the maternal health care in India was essential. Needless to say, initially the entire maternal health intervention was based on the roll out of facility based care in the country. It took decades to incorporate the community based approaches at the national level after which the maternal health interventions became more focused with both the outreach & in-reach components. The community based efforts on maternal health was initiated by Dr. Rao in the state of Andhra Pradesh in 1980 (Rao, B. K, 1980). The following box elucidates the details of Maternal Mortality Ratio in the country till date starting from 1957.

Table 1: Maternal Mortality Ratios (MMR) in India (1957-2022)

Year	Maternal Mortality Ratio	Source of data
1957	1287	NSS 14th round
1960	1355	NSS 16th round
1963-64	1174	NSS 19th round
1972-1976	892	SRS
1977-1981	844	SRS
1980	753	Bhaskar Rao
1982-1986	568	SRS
1982-1986	580	PN Mari Bhat committee's estimate
1990	570	WHO/UNICEF (World Health Report, 1999)
1992-94	572	FOGSI
1992-93	437	NFHS I
1997-1998	398	Retrospective MMR surveys
1997	408	SRS
1998	407	SRS
1997-98	398	SRS
1998-99	540	NFHS II
1999-2001	327	SRS prospective household reports
2001-2003	301	SRS special survey of deaths using RHIME
2004-2006	254	SRS
2005	540	World Health Report (reference year 2000)
2007-2009	212	SRS
2010-2012	178	SRS
2011-2013	167	SRS
2014-2016	130	SRS
2015-2017	122	SRS
2016-2018	113	SRS
2017-2019	103	SRS

Similarly, the MMR of UP as per SRS from 2007 to 2019 is given in the table given below.

Table 2: Maternal Mortality Ratio (MMR) in Uttar Pradesh (2007-2019)

Year	Maternal Mortality Ratio	Source of data
2007-09	359 (UP/UK)	SRS bulletin on Maternal Mortality
2010-2012	292 (UP/UK)	SRS bulletin on Maternal Mortality
2011-2013	285 (UP/UK)	SRS bulletin on Maternal Mortality
2014-2016	201 (UP/UK)	SRS bulletin on Maternal Mortality
2015-2017	216 (UP)	SRS bulletin on Maternal Mortality
2016-2018	197 (UP)	SRS bulletin on Maternal Mortality
2017-2019	167 (UP)	SRS bulletin on Maternal Mortality

The MMR of India is also given by World Bank from the period 2000-2017. The table below gives the details.

Table 3: Maternal Mortality Ratio (MMR) of India as per World Bank, WHO, 2019

Year	Maternal Mortality Ratio	Source of data
2000	370	WHO, 2019
2001	354	WHO,2019
2002	336	WHO,2019
2003	319	WHO, 2019
2004	303	WHO, 2019
2005	286	WHO, 2019
2006	270	WHO, 2019
2007	255	WHO, 2019
2008	240	WHO, 2019
2009	225	WHO, 2019
2010	210	WHO, 2019
2011	197	WHO, 2019
2012	185	WHO, 2019
2013	175	WHO, 2019
2014	166	WHO, 2019
2015	158	WHO, 2019
2016	150	WHO, 2019
2017	145	WHO, 2019

The Bhore committee report in 1946 was the first to talk about maternal mortality in India. The three strategies to reduce maternal mortality is dependent upon the three delays related to maternal mortality (Vora, K. S *et al*., 2009). The three delays include the personal, familial, socio-cultural & environmental factors. The three crucial delays are the delay in deciding to seek care, the delay in reaching the appropriate health facility & the delay in receiving care once inside a hospital (Chatterjee P, 2007).

LITERATURE REVIEW

This section includes the background of maternal health care at global, national and the state level. The national level efforts to address maternal mortality have been discussed briefly above in the introduction section. After Dr. Rao's efforts at community level in 1980, the efforts of multiple agencies led by UNICEF & GOI led to ascertaining the cause of maternal deaths through a process called Maternal and Perinatal Death Inquiry & Response (MAPDIER) which was piloted in Purulia district of West Bengal in 2005 (Chatterjee P, 1980). The process was implemented in 16 districts in five Indian states with high maternal mortality.

Following that after introduction of NRHM in 2005, the maternal health interventions had components like Janani Surakhya Yojana or Maternal Protection Scheme, Janani Shishu Surakhya Karyakram or Mother Child Protection Program, Safe Abortion Services & Maternal Death Audit (MDA) (PIP, NRHM, GoUP, 2007). As the term 'audit' created a fear among community, the MDA became Maternal Death Review (GOI, MDR guidelines, 2012).

Maternal Mortality reduction reflects on the health facility level's efficiency. Currently, the Pradhan Mantri Surakshit Matrutva Abhiyan (PMSMA) is operational through Public Private Partnership model where on 9th day of every month, Ante Natal Care (ANC) is given by registered Skilled Birth Attendants at the public health facilities since 31st July 2016 (GOI, PMSMA, 2016). In this way, the efforts of government of Uttar Pradesh are also significant when we track the reduction of MMR through SRS data. The following figure shows the reduction of MMR in UP & the portion was published in the Times of India newspaper of Lucknow edition dated 11th April 2022, the National Safe Motherhood Day. The figure shows reduction of MMR in India & UP during the period 2012-2020. The state of UP saved the lives of 1lakh (one tenth of a

million) new moms in a decade from 2007-09 to 2017-2019 as per data of RGI (SRS, 2007-2019).

UP saved lives of 1 lakh new moms in a decade

Lucknow: The life of an estimated one lakh new moms was saved in Uttar Pradesh over the past one decade with sustained efforts to improve safe motherhood services, suggests official data on maternal mortality, which is the proportion of maternal deaths per one lakh live births.

The recently released 'Sample Registration Survey Bulletin' on maternal health indicated that UP's maternal mortality ratio (2017-19) had come down to 167 against 359 in 2007-09. The decline over the decade in percentage points is 192, which is highest in the country. This means that the improvement recorded by UP in the past decade is over 53%.

Decoding the data, experts at Unicef (UP) pointed out that a decade ago, an estimated 22,000 mothers died during the childbirth each year, which has now come down to 10,000 per year. They pegged that the sustained improvement in maternal health services delivery has saved an estimated one lakh women in the past one decade.

Speaking on the sidelights of national safe motherhood awareness day observed on April 11 of each year, Unicef health officer Dr Prashant Kumar said, "It is important to keep the momentum in top gear as there is scope to save another 10% of women."

He said that maternal mortality in a region is a measure of reproductive health of women in the area. Many women in reproductive age-span die due to complications during and following pregnancy and childbirth or abortion.

Several reasons account for UP's leap of progress on the maternal health front. Health specialist, Dr Kanupriya Singhal compared data from the National Family Health Survey editions 4 (2015) and 5 (2019) to prove the point.

"Mothers who received antenatal care check-ups during pregnancy increased from 45.9 % (NFHS-4) to 62.6 % (NFHS-5). Then, mothers who had got at least four antenatal care visits increased from 36.4 % (NFHS-4) to 42.4% (NFHS-5). Also, institutional births increased from 67.8 % (NFHS-4) to 80.4% (NFHS-5)," she said.

NATIONAL SAFE MOTHERHOOD DAY

The experts also pointed out that state schemes such as Janani Suraksha Yojna (JSY) and Janani Shishu Suraksha Karyakram (JSSK) which provide cash incentive for institutional deliveries and free of cost delivery and transport in public facilities to mother and newborn have also contributed.

"This has led to change in preference of pregnant women from delivering at home in favour of institutional deliveries," explained Dr Singhal.

PROTECTING THEM IN TIME

Region	MMR as per SRS 2007-09	MMR as per SRS 2017-19	Decadal decline in point
India	212	103	109
UP	359	167	192
Assam	390	205	185
Rajasthan	388	143	177
Bihar	261	130	131
Odisha	258	136	122

As per WHO, maternal death is death of a woman during pregnancy or within 42 days of child birth from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes

A key indicator of maternal mortality is Maternal Mortality Ratio (MMR). It is measured as number of maternal deaths in a given time period per 100,000 live births

From 2007-09 to 2017-19, UP has recorded maximum decline on the count

However, it is way ahead of the ideal target of 70 per 1 lakh live births

Source: Office of Registrar General of India

Figure 1: TOI piece on MMR in India & UP in Lucknow edition dated 11th April 2022
(Source of data, SRS, 2007-2019)

In another study in Uttar Pradesh, the researchers found that utilization of maternal health services was low. Contact with the health worker & marginalization were the important factors for utilization of health services (Singh R *et al*., 2019). Another article stresses on economic status, gender & social status as these are closely interrelated & influences the use & access of maternal health services (Sanneving L *et al*., 2013).

A maternal series by Lancet stresses that all women need protection, standards need to be improved, care must be respectful & the health personnel who attends them needs to be remunerated & managed properly (Koblinsky M *et al*., 2006). This is exactly what the Government of India has done through the ASHA net work in the country through NRHM since 2005.

Objectives of the study

There are three objectives of the article. The first is to find out the current status of Homoeopathy in the maternal health practices, the second is to find out the details of the current & past implementation strategies and the third is to find out the link between Homoeopathy & maternal health practices.

Identification of research gap

After the literature review, the identification of the research gap is done. Here, the identified gap is that AYUSH systems like Homoeopathy has not been integrated in the maternal health care frame work in India. The dispensaries of the homoeopathic systems work vertically & there is no integration in the maternal health care component of the public health system. Although homoeopathy has proved its credentials in the field of maternal & child health & especially maternal health, its potential has not been streamlined in to the current programmatic interventions both at state & national level (GOI, 2007; Ministry of AYUSH, 2015).

Outcome

The significant outcome of any project is its contribution to the body of knowledge, influence policy making and bring positive impact in the lives of the people. After the completion of the current article, to contribute to the growth of literature in the field of maternal health, more academic articles like the current one will be written. The lead author did his doctorate in Home Based Newborn Care practices and through this study, the lead author deals with maternal health care practices. As SBAs, Referral & FRUs complete the entire package of maternal health care, published articles like the current one where the link between community and facility based approaches is brought out for the benefit of the state of UP and the country. The issues are also to be discussed with the students as the lead author teaches students of Masters of Public Health (Community Medicine) course of Lucknow university (Website of Lucknow university). The lead author has worked with Maternal & health projects of international level NGOs and the public health system in the state of UP & hence through symposiums and seminars, the lead author will disseminate the learning of the current article. All these approaches will lead to interactions with the policy makers at the administrative level and at

the community level, interactions are to be done through the stakeholders of NGO network.

Basically, outcomes are those that the entire community sees through. Emphasis on community based and facility based approaches is expected to lead to reduction in cases of complications thereby leading to less number of maternal mortalities. Less number of maternal mortalities helps to lead to increased adherence in community-based platforms like Village Health Nutrition and Sanitation days where the quality of services rendered is expected to improve (UNFPA, 2005). Improved quality of services may lead to inter-sectoral collaboration among health, education, PRI and sanitation departments. Case studies are to be written and published for such improved collaboration and enhancement of quality of services at a later stage. Basically, the above two paragraphs sum up the outcome.

Relevance for policy making

Maternal Mortality Ratio is the base data on which policies on maternal health are planned at central & state level. Earlier, Maternal Mortality Rate was used for policy making. As the denominator of the rate is unreliable, ratio came in the forefront. One lakh live births is a reliable denominator as people cannot hide live births & eventually the live births are tracked & reported. In case of 100000 pregnant women, pregnancy, abortions & still births can go un-reported & hence the denominator is unreliable. However, rate is used to calculate Lifetime Risk of a pregnant woman (SRS bulletins on maternal mortality). As homoeopathy can be an effective tool to reduce MMR & help address reducing maternal mortalities, policy making can be further strengthened at national & state levels.

Pregnancy Risk (source-SRS bulletins)

The Lifetime Risk of a pregnant woman in UP is 0.5% whereas in India it is 0.2%. This means the chance of a maternal death in UP is more than double then the national level. However, this is not the only risk that the mother encounters during pregnancy. The pregnancy risk of a woman in UP is also huge currently. In the absence of the latest census, let us project the population of UP to be 25 crores in 2022. As per census, 2% of the populations are live births. Hence, there are 50 lakhs live births in a year in UP currently. If we use the current MM Ratio of UP as per SRS 2019, it is 167 per 100,000 live births. So in 50 lakhs live births, the number of maternal deaths in UP in a year will be 167*50= 8350. Therefore, in any given day, 8350/365= 23 maternal deaths are taking place in UP. To calculate the Pregnancy Risk (PR), we need to divide number of maternal deaths in a year in UP by the number of live births in a year in UP. Hence, the PR in UP will be 8350/50 lakhs= 0.002. In other words, if a woman becomes pregnant for the first time in UP, her PR is 1 in 200. If she becomes pregnant second time, the PR will be 1 in 100, in third time, the PR will be 1 in 50, in 4^{th} time, the PR will be 1 in 25, in 5^{th} time, the PR will be 1 in 12, in 6^{th} time, the PR will be 1 in 6, in 7^{th} time, the PR will be 1 in 3, in 8^{th} time, the PR will be 1 in 1.5, in 9^{th} time, the PR will be 0.75 which is less than 1 so death is inevitable. This is how it is said that multiple pregnancies put the women in higher risk.

Relevance to Society

Saving mothers will eventually reduce MM Rate and MM Ratio. Hence, maternal survival becomes the plank of the article. Maternal health programs have already demonstrated that they are effective maternal survival approaches that lead to population stabilization in the long run. Currently, the government of U.P. has announced the new population policy where couples are encouraged to have two children in order to get benefits from the public health system. Strengthening the maternal health approach will address reduction of maternal mortality in the long run. A strengthened health facility will handle referred cases effectively thereby improving the community-based referral system timely and effectively. Such approaches will build confidence and trust among the community towards the public health system. Effective referrals will render respect and dignity among the triad of Front-Line Workers, community and the health system. Timely referrals of high risk cases will also lead to effective tracking of both the mother and child thereby improving timely registration of birth events in the community. Timely tracking will lead to early diagnosis, treatment and referral at the community level. This eventually leads to better management of verbal autopsies of Maternal Death Review and to know the cause of death at the ground level. Based upon the causes, appropriate strategies will be developed.

Maternal Health modalities & Homoeopathy

The figure mentioned below shows the causes of maternal deaths in rural India (SRS, 2019).

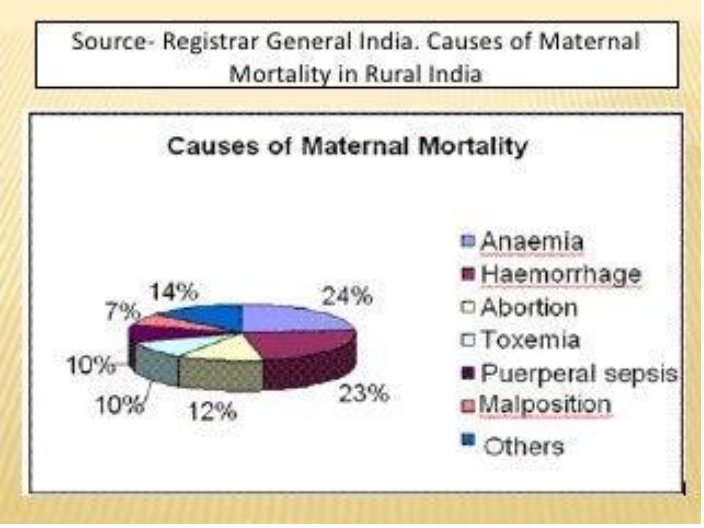

Figure 2: Causes of Maternal Mortality in rural India, RGI, SRS

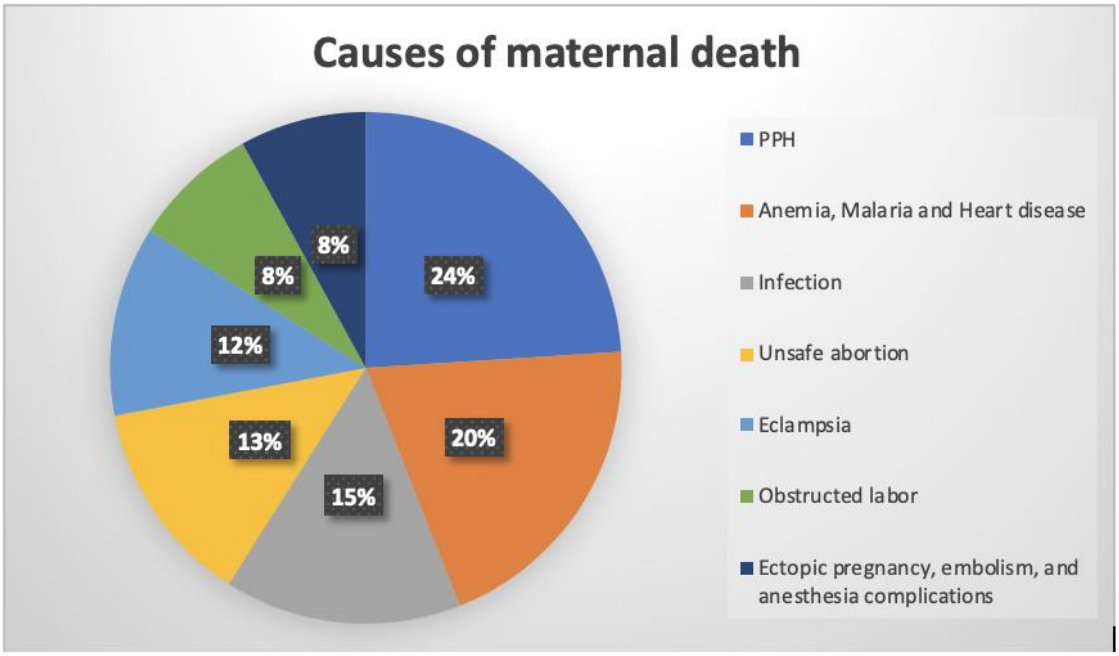

Figure 3: Causes of Maternal Deaths in India (Source-causes of maternal deaths in india.png-wikimedia commons, commons.wikimedia.org; UNIGME, 2019)

Let us analyze the major causes of neonatal deaths in India. The major cause of deaths among mothers is PPH followed by anaemia, malaria & heart disease. The next major cause is infection related followed by unsafe abortions. Among other causes, there is eclampsia. Obstructed labor & ectopic pregnancy+embolism+anaesthesia complications are given equal weight.

Regarding the timing of deaths, it is inferred that half of total maternal deaths occur in the first month of the postpartum period that lasts for 6 weeks after birth (GOI, INAP, 2014: MCH guidelines, 2007). The first week after birth is therefore critical for not only the newborn but also the mother.

When we address the cause of death & apply homoeopathy to deal with the causes both at facility & community level, following protocol can be adhered to at both the levels. All the medicines are to be given in 40 size globules or in drops in water base.

- PPH- In case of heavy bleeding- Haemamelis in potencies & mother tincture, Millefolium in potencies & mother tincture. All other management modalities are to be adhered to.
- Infections- Puerperal Sepsis- Pyrogen & Calendula in potencies along with Echinacea mother tincture, Streptococcinum & Staphylococcinum in potencies, Tetanus- Hypericum & Tetanotoxinum in potencies.
- Unsafe abortions- Pyrogen in potencies, Cimicifuga, Viburnum Opulus & Sabina in

potencies. Sabina to be given as a specific to prevent abortions. In case of hydatid moles in abortion, give Pyrogen in potencies to expel the moles.

- Eclampsia- Pyrogen, Cicuta V in potencies along with Acid Hydrocyanic in mother tincture. Mag Sulph-3X & in potencies. Mag Sulph injections are recommended in RMNCH+A framework.
- Obstructed labor- along with all the management related interventions, Belladonna, Cimicifuga & Pulsatilla in potencies.
- Ectopic pregnancy, embolism & anaesthesia complications- In ectopic pregnancy, give Arnica, Hypericum & Haemamelis to control internal bleeding along with immediate hospitalization for surgical intervention. In embolism, Carbo Veg, Haemamelis & Amyl Nitrosum in potencies to control the embolic phenomena followed by hospitalization. In complications from anaesthesia, treat symptomatically while giving Cocculus in potencies as a specific.
- Besides this, during pregnancy & during Ante Natal Care, Merc Cor for albuminuria, Sumbul mother tincture in hypertension, Symphori Carpus Racemosa in vomiting of pregnancy, Syphilinum for foetal problems, Sabina to prevent abortions & Bio Combination number 26 & Lecithin-3X in tablets to all pregnant women to prevent anaemia & physical problems.
- If there is history of still births, give Cimicifuga in low potencies to prevent in subsequent pregnancies.

Maternal health care & homoeopathy in public domain

Currently, the Essential Drug List of Homoeopathy, Department of AYUSH shows one category that includes maternal care. The category is Menstrual & Reproductive Health Problems. Under various color categories, the potencies of each medicine are coded. The color seven highlighters only suggests to use the medicine in these potencies from a list of 233 medicines besides the biochemic medicines, ointments & drops to be used locally (GOI, AYUSH, EDL-H,2013).

Another document in the public domain is the 8th training module of ASHA developed by NHSRC in 2005 for NRHM. The module has a list of common medicines that describes their use in different conditions or common ailments (GOI, NHSRC, 2005).

These two documents are vague & hence the need of the hour is to develop a treatment protocol for maternal health care in homoeopathy. It should be developed on the lines of the RMNCH+A framework & maternal health components. The causes of deaths should also be taken into account while developing the protocol.

CONCLUSION

The admission of homoeopathy effectively in the field of maternal health care will enrich the homoeopathic students & fraternity as there will be value addition towards understanding epidemiology & mortality of mothers. They will continue to practice effectively & be able to deal with new challenges that will continue to emerge in care of maternal health. It is not possible for the community to wait for & rush for care at tertiary facilities for every risk pregnancy or normal pregnancy. No strategy can be a panacea for the emerging challenges in maternal health care. It is here that the cost effectiveness & clinical effectiveness of Homoeopathy will come handy for the public & private health systems while dealing with masses for a developing country like India. Homoeopathy having proved its mettle in the field of maternal health will go a long way in arresting & controlling the problems at the beginning phase of each life. With a low Total Fertility Rate of 2.1 at the country level (NFHS 5, 2019-21) which equivalents the replacement level, it is imperative that all pregnancies are safe.

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