

EVALUATION OF NEED FOR BASIC PACKAGE OF ORAL HEALTH CARE IN INDIA- A REVIEW

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ABSTRACT:

Oral health problems remain a global issue and hence requires global attention. Oral diseases are progressive and cumulative, becoming more complex over time, thus affecting our economic productivity and compromise our ability to work. WHO collaborating centre in Nijmegen has developed the Basic Package for Oral Health Care , which places great emphasis on approaches which are affordable, feasible, acceptable and can be easily provided within the framework of Primary Health Care System. The Three major components of Basic Package for Oral Health Care comprises of Oral Urgent Treatment, Affordable Fluoride toothpaste, and Atraumatic Restorative Treatment. These Three components of Basic Package for Oral Care depends on various factors such as human and financial resources, existing infrastructure, local needs, treatment demands of the community, their leaders and dental association. The effort to standardize a global approach to bring about improvement in the condition of underserved population of developing countries can be enhanced if the community adopts and

advocates the Basic Package for Oral Care principle. NGO's, Local Dentists, Primary Health Care and Public Private Partnership plays an important role in successful implementation of the Basic Package for Oral Care.

Key Words: BPOC, Primary Health Care, Public Private Partnership

INTRODUCTION:

There are vast differences between developed and developing countries in Oral health status and in the availability, access and affordability of oral health services. The outcome indicators of health are all directly influenced by the standards of living of a given population.¹

India is primarily a rural community with 72.2% of its population being the village occupants and the rest 27.8% are residents of urban area. The reasons for such greater sheer magnitude of oral problems are not known, but these oral problems are known for their unique disposition of being progressive in nature leading to lack of remission or termination if left untreated, need for technically demanding, expensive and time consuming professional treatment . Further, these oral problems are significantly associated with pain, agony, functional and esthetic problems; also loss of working man-hours. These adverse features in a long run will have a substantial amount of negative impact on quality of life at biological, psychological and social levels. Hence, oral problems are considered to be one of the few categories of diseases emerging as a public health problem in India. This necessitates for a return to primary health care principle of focus on prevention.

Application of various preventive measures could be one of most cost-effective tool in the prevention of oral problems in enhancing the individuals and the community to lead a socially and economically productive life. However, in India most common approach to combat these oral problems at the population level is of curative in nature which does not appear to be cost-effective as compared to preventive approach.²

There is an urgent need for an effective oral health program meant for the rural community.³ Keeping all these point in view BPOC will be an ideal approach to minimize dental morbidity in Indian population.

Oral health inequity and issues of the Dental Workforce in India:

One of the key factors contributing to oral health inequity is lopsided Dental Care workforce planning in India. Following brief description of the scenario in India, I would like to focus on the following critical issues related to the dental workforce:

1. Deficient manpower planning and projection,
2. The changing disease pattern affecting the workforce, and
3. The changing role of women in the workforce/ Utilizing ASHA/ANM/Anganwadi workers in Dental health education.

Deficient Manpower Planning and Projection:

This is one of the key issues as the basic fault lies in the defective planning of the workforce and no projection or forecast for the future. Strategies are not developed taking into consideration what could happen in the future.⁴

Shortage of Dental Health Professionals.

In 2004, India had one dentist for 10,000 persons in urban areas and 2.5 lakh persons in rural areas. The recommended level by WHO is 1:7500.

WHO recommended the following for Oral Care:

1. Oral health promotion
2. Affordable fluoridation of the mouth.
3. Emergency care.
4. Basic curative treatment using the Atraumatic Restorative Treatment approach.⁵

The Basic Package of Oral Care: A Downstream Intervention

It has been convincingly argued that a social determinants approach is crucial for establishing a population strategy framework that highlights the need to examine the underlying “cause of the cause” or social conditions that result in unequal oral health distribution and disease. In order to comprehensively address oral health inequalities, current research suggests a conceptual shift from the traditional “downstream” biomedical/behavioral model (in which individual risk factors are assessed and preventive/educational interventions focus on behavioral change at the individual level with little focus on the broader factors that influence well-being) to a broader “upstream” model that focuses on the social environments in which oral health behaviors are formed. Downstream interventions have a predominantly curative focus and target already established harmful health behaviors. Upstream interventions are directed

at the circumstances (such as poverty and illiteracy) that may bring about harmful health behaviors and conditions. Upstream interventions thus focus on prevention and health promotion at a societal level. They include comprehensive educational media campaigns, community engagement, healthy public policies, and legislative action.^{10,14} An emphasis on community and societal versus individual interventions is more likely to have the desired impact on oral health outcomes among vulnerable populations.

The WHO Collaborating Centre at the University of Nijmegen in The Netherlands has worked within primary oral health care principles to create an affordable and sustainable community service called the basic package of oral care (BPOC). The BPOC is designed to work with minimum resources for maximum effect and does not require a dental drill or electricity. The BPOC can be tailored specifically to meet the needs of a community. Most significant is the fact that a dentist trained in BPOC can train local ancillary medical and dental personnel to become BPOC-proficient. These local non-dentist BPOC-trained individuals can then become the primary resource for oral health promotion and simple curative care in their communities. A large non-dental labor force, including community health workers (CHWs) and teachers, is integral to primary oral health care (POHC) and BPOC. Most developing countries have a large contingent of community health workers compared to the professional dental work force. These workers are trained to deliver a range of services, including childhood immunization promotion, growth monitoring, family planning, and health promotion and education. They also treat minor ailments and injuries, and are trained to identify and refer

more serious cases to physicians.¹⁸ As such, they have the educational and clinical capacity required to learn BPOC and promote POHC.¹

Components of BPOC^{3,6}

- Oral Urgent Treatment (OUT)
- Affordable Fluoride Toothpastes (AFT)
- Atraumatic Restorative Treatment (ART)

A] Oral Urgent Treatment (OUT) for the Emergency Refers to management of oral pain, infections and trauma. This discusses services targeted at the emergency relief of oral pain, management of oral infection and dental trauma through (OUT). An OUT service must be tailored to the perceived needs and treatment demands of the local population.

The three fundamental elements of OUT comprises of: -

- Relief of oral pain
- First aid for oral infections and dento-alveolar trauma
- Referral of complicated cases.

Although most oral diseases are not life threatening, but still they constitute an important public health problem. Their high prevalence, public demand for treatment, and their impact on the individual and society in terms of pain, discomfort, functional limitation and handicap affect the quality of life. In addition, the social and financial impact of oral diseases on the individual and community can be very high.

Treatment Modalities (OUT)

- Extraction of badly decayed and severely periodontally involved teeth under local anaesthesia.

- Treatment of postextraction complications such as dry sockets and bleeding.
- Drainage of localized oral abscesses.
- Palliative drug therapy for acute oral infections.
- First aid for dento-alveolar trauma.

Referring complicated cases to the nearest hospital. Oral Urgent Treatment (OUT) is an on-demand service providing basic emergency oral care. Relief of pain is the predominant treatment demand of underserved populations. Emergency oral care that is easily accessible for all should be the first priority in any oral health programme.

B] Affordable fluoride toothpaste (AFT)

Affordable Fluoride Toothpaste (AFT) is an efficient tool to create a healthy and clean oral environment. The WHO states that fluoride toothpaste is one of the most important delivery systems for fluoride. The availability and affordability of effective fluoride toothpaste is essential for every preventive programme. Rationale for using Affordable Fluoride Toothpaste (AFT).

- The anti-caries efficacy of fluoride toothpaste has been proven in an extensive series of well-documented clinical trials.
- The widespread and regular use of fluoride toothpaste in non-EME countries would have an enormous beneficial effect on the incidence of dental caries and periodontal disease.

□ Governments should recognize the enormous benefits of fluoride toothpaste to oral health and should take the responsibility to reduce or eliminate the tax burden on this product.

Affordable fluoride toothpaste with anti-caries efficacy should be made available to all to ensure that all populations are exposed to adequate levels of fluoride by the most appropriate, cost-effective and equitable means.

The packaging of the fluoride toothpastes should be clearly labelled with the fluoride concentration and the descriptive name of the fluoride compound. Advice for adult supervision of tooth brushing by young children. Production and expiration date should be labelled. Instructions for using a pea-sized amount of paste by children. Directions for proper rinsing after brushing should be given. The Fluoride toothpaste that meets recommended standards for efficacy should be tax-free and classified by governments as a therapeutic agent rather than a cosmetic.

C] Atraumatic Restorative Treatment (ART)

While preventive methods, such as affordable fluoride toothpaste, continue to make a large impact on the level of caries, some carious lesions inevitably progress to cavitations. ART is a novel approach to the management of dental caries that involves no dental drill, plumbed water or electricity. The ART approach is entirely consistent with modern concepts of preventive and restorative oral care, which stress maximum effort in prevention and minimal invasiveness of oral tissues. Appropriately trained dental auxiliaries, such as dental therapists, can perform ART at the lower level of the health care pyramid such as in

health centres and in schools. This makes restorative treatment more affordable, while simultaneously making it more available and accessible. ART therefore meets the principles of PHC. Effectiveness of the ART approach, survival of ART restorations, ART restorations vs. conventional restorations and the acceptability of ART restorations are some of the issues to be considered prior to placement of ART restorations. The ART approach is consistent with modern concepts of preventive and minimally invasive restorative oral care. ART is particularly suitable for school children and can be provided within a school dental care system. By treating small cavities premature extractions are avoided.

Implementing the BPOC

1) Role of NGOs in implementing the Basic Package of Oral Care:

The concept of the BPOC provides many opportunities for NGOs to engage themselves in a structured effort towards better oral health. Despite a growing importance of non-governmental organisations (NGO) in the medical and general health sector, which has brought about a new generation of highly professional, social responsible and financially transparent organisations, the situation in the sector of oral health development assistance is very different.

Some of the drawbacks of this sector include:

- Financial resources for the majority of NGOs are very limited,

- The degree of professionalism is generally very low (in terms of organisation management, accountability, volunteer training, evidence-based interventions, quality control, evaluation and sustainability)
- Integration into existing local community structures is often very low,
- Lack of coordination, information and technology sharing between the different dental NGOs.

Although organisations and individuals involved are often highly motivated and sacrifice significant amounts of time, money and resources with the best of intentions, the impact and sustainability of such volunteer engagement remains at best very limited. Therefore, a profound strategic reorientation for the majority of dental NGO 's and the volunteers serving for them is long overdue. Their programmes and projects need to be reoriented towards projects that are efficient, sustainable and integrated and accepted by host communities.

2) Role of Local Dentists and Dentist as a Volunteer in a Foreign Country

There are a fairly large number of dentists from the high-income world who are prepared to volunteer to work in a low socio-economic community for a limited period. Their motivations to volunteer may vary but in most cases are rooted in the recognition of need and the desire to help. They seek guidance from NGOs sending volunteers or start projects on their own with the best of intentions and undoubtedly praiseworthy motives. Patients receiving medical assistance certainly benefit, but these patients constitute only a small and almost insignificant section of the whole population. It is self-evident

that only with a close cooperation with local communities, government administrations and other relevant organisations this type of NGO and volunteer involvement is possible.

3) Role of Oral care and Primary Health Care (PHC)

During the last few decades, PHC has been the basis of health care in many low and middle-income countries. If sufficient funds and manpower are available then primary health care can be efficient ways to achieve the goal. Hence there is a need to strengthen the health care centres at all levels. The oral health care should be blended with the ongoing primary medical care.

4) Role of Public Private Partnership (PPP)

Public- private partnerships or PPPs have shown their ability to meet some of these challenges in India. Public private partnership has been identified as a key focus area for increasing access to health services by integrating common people and local government institutions. Public and Private sectors have separate but complimentary roles recognized by health sector which tried to make best use of their comparative advantages. There is a need to identify areas of collaboration of varied nature in PPP some of them are awareness generation, health education, outsourcing of nonhealth services. With respective strengths and weaknesses, neither public sector nor private sector alone can operate in best interest of health system.^{3,6}

4. The Community Health Workers have evolved with community based healthcare programme and have been strengthened by the PHC approach. However, the conception and practice of CHWs have varied enormously across countries, conditioned by their aspirations and economic capacity. The use of community health workers has been identified as one strategy to address the growing shortage of health workers, particularly in low-income countries. Using community members to render certain basic health services to the communities they come from is a concept that has been around for at least 50 years. There have been innumerable experiences throughout the world with programmes ranging from large-scale, national programmes to small-scale, community-based initiatives.

First, CHWs can make a valuable contribution to community development and, more specifically, can improve access to and coverage of communities with basic health services.

Second, for CHWs to be able to make an effective contribution, they must be carefully selected, appropriately trained and – very important – adequately and continuously supported. Large-scale CHW systems require substantial increases in support for training, management, supervision and logistics.

Third, CHW programmes are therefore neither the panacea for weak health systems nor a cheap option to provide access to health care for underserved populations. Numerous programmes have failed in the past because of unrealistic expectations, poor planning and an underestimation of the effort and input required to make them work. This has unnecessarily undermined and damaged the credibility of the CHW concept.

Fourth, by their very nature CHW programmes are vulnerable unless they are driven, owned by and firmly embedded in communities themselves. Where this is not the case, they exist on the geographical and organizational periphery of the formal health system, exposed to the moods of policy swings without the wherewithal to lobby and advocate their cause, and thus are often fragile and unsustainable.⁷

CONCLUSION:

Accepting the fact, that mere curative approach is not sufficient to limit disease, both curative as well as preventive approach needs to be followed. BPOC can be termed as both curative as well as preventive approach. Because of the uncomplicated treatment modality in BPOC, other auxiliary staffs can be applied along with dentist. In India, where 70% of the population resides in villages and where both health and oral health is still neglected issue, only dentist will not be able to cover all the proportion of population in Rural area. We have to train school teachers, ANM, ASHA workers, Anganwadi workers regarding the treatment modalities of BPOC. The dentist can also train the local health workers to continue with the care after the departure of the volunteer. Training packages in form of videos can be created to serve the purpose. However, training is only justified if there is a functioning Primary Health Care system where the health worker can work with the acquired OOT skills. Also, referring network for cases beyond the health worker's capabilities. It is imperative for a local dentist, a volunteer or an NGO to carry out regular evaluation visits to monitor the

health worker's activities, the service performance and to make changes where necessary. Thus, BPOC being an ideal approach for limiting dental morbidity for underserved population of India, Government should focus more on this approach.

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