International Journal of Basic and Applied Medical Sciences ISSN: 2277-2103 (Online)
An Online International Journal Available at http://www.cibtech.org/jms.htm
2013 Vol. 3 (2) May-August, pp.166-170/Sandeep et al.
Review Article

BASIC PACKAGE FOR ORAL CARE: RELEVANCE AND IMPLEMENTATION STRATEGIES IN INDIAN SCENARIO: A REVIEW

Sandeep Kumar[1], Ravishankar[2], *Kumar Sumit[3] and Ashrita Saran[3]
[1]*Department of Public Health Dentistry, Sri Aurobindo College of Dentistry*
[2]*Department of Statistics, Manipal University*
[3]*Department of Public Health, Manipal University*
**Author for Correspondence*

ABSTRACT
The *Basic Package of Oral Care* (BPOC) places great emphasis on approaches which are acceptable, feasible and affordable and can be provided within the framework of the existing first line care, the primary health care system. Oral Urgent Treatment (OUT), Affordable Fluoride Toothpastes (AFT), Atraumatic Restorative Treatment (ART). Role of NGOs in implementing the Basic Package of Oral Care, Role of local dentists and dentist as a volunteer in a foreign country, Role of Oral care and Primary Health Care (PHC), Role of public private partnership. The implementation of the three components of the BPOC depends on prevailing local factors, including available human and financial resources, existing infrastructures, local perceived needs, treatment demands of the community, their leaders and dental association.

***Key Words**: BPOC, ART, AFT, OUT, Public Private Partnership*

INTRODUCTION
Oral health remains a luxury for most of the world's population. Oral health problems remain a global problem and therefore must be a global concern. The Basic Package of Oral Health Care (BPOC) represents a fusion of concepts and approaches that have developed over the last decade. In presenting this package, great emphasis has been placed on approaches with proven effectiveness and that are acceptable, feasible and affordable for most disadvantaged communities. The BPOC is regarded as an essential foundation to any oral health care provision in a country or community (Workshop Report, 1951).

The *Basic Package of Oral Care* (BPOC) developed by the WHO Collaborating Centre in Nijmegen, describes a package of basic oral care activities which can be provided within the framework of the existing first line care, the *Primary Health Care System*. The fundamental idea behind the concept is that the oral care provided meets the basic and most urgent needs of any population served (Frencken *et al.,* 2002).

***Principle of BPOC** (Workshop Report, 1951)*

• The philosophy of Primary Health Care (PHC), with its leading principle of basic oral care for all and emphasis on prevention and affordable and sustainable services, was a guideline.

• The basic assumption was that the services offered should primarily meet people's perceived needs and treatment demands.

However, two main barriers prohibit proper inclusion of oral health care into the PHC system: dentistry's traditional orientation toward individual care rather than a community approach, and its inherent technical - rather than social and behavioural - character. Thus, the philosophy of conventional dentistry must change to one of low-technology treatment control and prevention to meet the perceived oral health needs and treatment demands of the community.

Rationale of BPOC

The situation in most non-EME (non-established market economy) countries and in disadvantaged communities in EME (established market economy) countries calls for a change in approach. Traditional western oral health care should be replaced by a service that follows the principles of PHC. This implies that more emphasis should be given to community-oriented promotion of oral health.

Review Article

Components of BPOC (Pine and Harris, 2007)

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

1. 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 (Helderman, 2006)

- Relief of oral pain
- First aid for oral infections and dento-alveolar trauma
- Referral of complicated cases. Need for OUT
- 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 anesthesia.
- Treatment of post-extraction 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.

2. Affordable fluoride toothpaste (AFT) (Helderman, 2006)

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.

Recommendations

- 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 labeled 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 labeled.
- Instructions for using a pea-sized amount of paste by children.
- Directions for proper rinsing after brushing.
- The method of dispersal of toothpaste should facilitate the use of small amounts of the paste.

• Fluoride toothpaste that meets recommended standards for efficacy should be tax-free and classified by governments as a therapeutic agent rather than a cosmetic.

3. Atraumatic Restorative Treatment (ART) (Helderman, 2006)

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 cavitation. 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 centers 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.

Indian Scenario

Only 25% of India's specialist physicians reside in semi-urban areas, and a mere 3% live in rural areas (Hobdell, 2003). As a result, rural areas, with a population approaching 700 million, continue to be deprived of proper healthcare facilities. The people residing in rural India are deprived of health care facilities, are unaware and illiterate.

Thus, there is a need to implement BPOC to improve oral health of the people residing in rural and urban slums of India.

Unsurprisingly, standards of oral health are very poor in India, with a large proportion of the population affected by conditions such as gum diseases and tooth decay; in addition to this, two thirds of people have never seen a dentist. Thus basic package of oral care with its three important components (OUT/ART/AFT) is an important tool to improve oral hygiene status of the people in India.

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 (Helderman *et al.*, 2002).

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 NGOs 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 (Helderman, 2006).

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 (Hobdell, 2003).

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.

The dentist can also train the local health workers who can continue with the care after the departure of the volunteer. Training packages in form of videos can be created to train local health workers. However, training of health workers in OUT is only justified if there is a functioning Primary Health Care system where the health worker can work with the acquired OUT skills. There also needs to be referring network for cases beyond the health worker's capabilities. Once the training is completed it is imperative for a local dentist, a volunteer or an NGO to carry out regular evaluation visits. These visits are needed to monitor the health worker's activities, the service performance and to make changes where necessary. It is self-evident that only with a close co-operation with local communities, government administrations and other relevant organisations this type of NGO and volunteer involvement is possible (Helderman *et al.*, 2002).

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

More than 25 years ago, the Alma – Ata conference, organised by the WHO and UNICEF, gave for the first time priority to local, simple curative and preventive care addressing the needs of the population; in contrast to expensive western-oriented health care which remains largely restricted to hospitals and private clinics (WHO, 1978). 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 our goal. Hence there is a need to strengthen the health care centres at all levels.

4) Role of Public Private Partnership

Given strong economic growth of country in past decade, increasing demand for public investment across all sectors has created investment gaps in these key sectors. In addition, challenges are also increasing in terms of service delivery standards, performance benchmarks, and incorporation of technology into provision of health and education services to all, especially poorest and those located far from urban growth centres of country. 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 (Health Sector Reforms, 2003). There is a need to identify areas of collaboration of varied nature in PPP some of them are awareness generation, health education, outsourcing of non-health services. With respective strengths and weaknesses, neither public sector nor private sector alone can operate in best interest of health system.

CONCLUSION

The implementation of the three components of the BPOC depends on prevailing local factors, including available human and financial resources, existing infrastructures, local perceived needs, treatment demands of the community, their leaders and dental associations. The main components of the BPOC (Oral Urgent Treatment, Affordable Fluoride Toothpaste, Atraumatic Restorative Treatment) offer many opportunities for effective, affordable and sustainable activities that aim to improve oral health on the community and population level. A reorientation of dental NGOs and the volunteers working for them, revival of existing primary health care services and public private partnership is needed for the successful implementation of BPOC.

REFERENCES

Benzian H and Gelbier S (2002). Dental aid organisations: baseline data about their reality today. *International Dental Journal* **52** 309-314.

Emerging Market Report (2007). Health in India 2007 Pricewaterhouse Coopers http://www.cdc.gov/ncidod/dvbid/dengue/.

Frencken JE, Holmgren C and Helderman VP (2002). WHO Basic Package of Oral Care (BPOC). Nijmegen, Netherlands: WHO Collaborating Centre for Oral Health Care Planning and Future Scenarios, University of Nijmegen.

Health Sector Reforms (2003). How it affects reproductive health-A report.

Helderman VP (2006). Implementation of BPOC: Towards a reorientation of dental NGOS and their volunteers. *IDJ* **56** 44-48.

Helderman VP, Lo E and Holmgren C (2002). Guidance for the planning, implementation and evaluation of oral health care demonstration projects for under-served populations. *International Dental Journal* **52** 449-452.

Hobdell M (2003). Taxonomy of volunteering - humanitarian missions: what they can do and what it involves. *Developing Dentistry* **4** 16-20.

Pine CM and Harris R (2007). Community oral health 532.

WHO (1978). Alma-Ata, Primary Health Care. Geneva: World Health Organization.

Workshop Report (1951). FDI world dental federation. www.fdidental.org.