PhD Abstract

SCHOOL-BASED ORAL HEALTH PROGRAMMES IN THE TSHWANE DISTRICT OF GAUTENG: SCOPE, IMPLEMENTATION AND OUTCOMES

Background: School settings are an essential platform for promoting oral health at the early stages of a child's life; hence implementation of such programmes needs to be well executed in order to obtain long term favourable oral health outcomes among children and adolescents.

Objectives: My study sought to assess the scope, implementation and outcomes of school oral health programmes in the Tshwane district of Gauteng South Africa. The key objectives were as follows;

- To describe provincial and district level managers' perceptions and translation of school oral health policy,
- To describe the implementation processes and gaps of school oral health programmes in the Tshwane health district.
- To determine the dental health status of the learners and factors associated with the dental status.
- To determine implementation fidelity and its effects on the dental status of school learners receiving the school oral health programmes.

Methods:

The study utilised a convergent parallel mixed method approach where oral hygienists and leaners at participating schools were assessed. The first objective in chapter 4 described the scope of school-based oral health services. The second objective in chapter 5 elaborated on the actual programme implementation. The third and fourth objectives in chapters 6 and 7 determined the effect of the programme on expected outcomes and identified the direct and indirect factors affecting the quality of the programme.

The first and second objectives of my study were undertaken using qualitative study designs. The first objective explored perspectives of oral health managers by using an exploratory qualitative study where eight oral health managers from the Gauteng provincial and district offices were interviewed. In addition to the interviews, policy documents were reviewed.

The second objective described the implementation approaches from the perspectives of 10 oral hygienists who were implementing the programme. A qualitative explanatory case study was undertaken using a combination of data from direct observations, policy documents and interviews. The measuring tools included process maps and an interview guide.

The third and fourth objectives were undertaken using quantitative cross sectional study designs. A multistage sampling technique was employed to randomly select 10 primary schools from the oral hygienists' list of schools; two grades in each school were selected and all learners in the selected grades were included in an oral health examination. Ten oral hygienists were observed and interviewed as they carried out the activities of the programme and records were reviewed. Data collection tools included an oral health examination form, and an implementation fidelity checklist.

Results: The results of the first objective indicated that in as much as national policy covered the principles of strategic vision, responsiveness to health needs, equity and inclusivity with clarity in the strategic document; the principles were not translated consistently by the managers at a local level. In the second objective, the results revealed that policy implementation was affected by poor prior planning, inadequate resources, poor school infrastructure and a lack of support from key stakeholders. In the third objective, upon assessing 736 learners with ages raging between 6-16 years, the prevalence of dental caries in the permanent dentition was found to be 25.9%; in the primary dentition it was, 30.2% and the unmet treatment need (UTN) was 89.6%. The last objective revealed that the level of fidelity obtained was 39.6% and that it was shown to be inversely correlated with levels of decay. In addition, to attain the ideal of zero levels of decay, an 80% of fidelity was required. The fidelity elements that were found to directly predict the outcome of decay included duration (IRR, 0.49; p=0.02) coverage (IRR, 0.54; p=008), content (IRR, 1.36; p=0.03) and age (IRR, 2.14; p=0.00). Moderating factors of fidelity which indirectly influenced the outcome of decay included facilitation strategy, duration and age. These were predicted to reduce the risk of decay by 92%, 83% and 48% respectively.

Conclusions: There was poor policy awareness and hence there were policy and practice misalignment and variations in the processes of implementation across the 10 schools.
Although the prevalence of dental caries was relatively low in comparison to similar studies in South Africa, there were high levels of unmet treatment need. The school oral health programmes exhibited high levels of pupil coverage, however, the content (28%) of the programmes and fidelity offered was low (39.6%). Much of the gaps in policy translation were attributed to inadequate human resources and poor communication processes by the national leadership to support district level implementation. Therefore optimizing multi-sectoral participation and identifying shared, novel and practical solutions to policy translation impediments is necessary.

Key words: Implementation; Fidelity; Oral health; School health; Health policy; Programmes