

TRANSMISSION, DETECTION AND TREATMENT OF HEAD LICE IN THE COMMUNITY

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Human head lice cause health-related, economic and social problems for millions of schoolchildren and their families world-wide. Treatment problems are partly explained by the repeated development of resistance in lice to insecticides. In the last few decades, misdiagnosis, misapplication and reinfestation, by members of the public, have also been blamed for the spread of lice in schoolchildren, and control-policies have focussed on education to correct these presumed control-failure factors. However, very little precise study has been conducted into transmission dynamics, or detection and treatment patterns in the community. Individual cases and local community experience and treatment of head lice were studied in attempt to identify important factors involved in transmission, detection and treatment-outcomes. Survey responses revealed that the majority of families are lice-free until exposed to lice in the first instance when their children commence pre-school and school. Direct examinations confirmed that, despite reasonable efforts at management, laypersons' difficulties with self-diagnosis, failure of tertiary treatment attempts, and long-term carriers in classrooms are important problems, aside from first-line pediculicide failure. Without haircutting or assistance from an experienced examiner, laypersons were seen to miss active infestations in the hair, particularly after partially effective treatment, regardless of education and fine-tooth detection-combing. Detection combing is not efficient, or tolerable for very young children, in some hairstyles. A critical aspect of head lice (*Pediculus humanus capitis*) research and control-approaches is the correct diagnosis of the status of the infestation.