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INCORPORATING GREATER COMMUNITY ENGAGEMENT APPROACH IN THE NATIONAL EAR AND HEARING CARE (NEHC) TO REDUCE HEARING HEALTH INEQUALITIES IN MALAYSIA

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WHAT'S AT STAKE?

Hearing loss is often unnoticed due to its invisible disability, yet it is rightly considered as a worrying global health burden. Currently, more than 1.5 billion people which accounted to 20% of the global population, have hearing loss, and almost 430 million people from this percentage experience moderate to high degree of hearing loss (1).

It has impacted individuals across all ages, and if left unaddressed, leads to damaging consequences to social interaction, psychosocial development, education achievement and even economic independence (2). Hearing loss provokes obstacle in language, speech and cognition development particularly during early childhood. This could severely affect their communication and learning processes, resulting in low academic performance and education attainment.

BRIEF CONTEXT

PREVALENCE

- More than 1.5 billion people have hearing loss
- 430 million people experience moderate to high degree of hearing loss

GLOBAL HEALTH BURDEN

- Impacted individuals across all ages
- Led to challenges in interpersonal interaction, psychosocial development, education achievement and even economic independence

Social interaction will be limited and difficult, leads to possibly social isolation and loneliness. At family and society level, this lack of social function and networking often results in increased stress, reduced satisfaction and poor quality of life. Hearing loss is also causing economic burden to the country. Study found that hearing loss contributed to increased risks of unemployment and underemployment (3). It is estimated that the unemployment related costs and premature retirement due to hearing loss accounted to USD 182.5 billion per year (3). Ultimately, unaddressed hearing loss in a country causes detrimental effects in various levels of society. All these effects transmit signal to the bigger hearing health inequalities.

Tsimpida et al (4) demonstrated a conceptual model for hearing health inequalities through four different stages of age; i) childhood ii) adolescents iii) adulthood and iv) elderly. Each stage is adversely affected according to specific social determinants of health; such as socio-economic resources, educational attainment, occupation and retirement income. However, another determinant predominantly causing inequalities at all stages, which is health illiteracy. Health illiteracy affect the awareness of hearing loss, causing stigmatization among society, and also damaging the hearing health behaviours such as poor help-seeking, low hearing aid acquisition and usage.

Improvement of hearing health literacy leads to reduce hearing health inequalities, and this can be achieved by engaging greater community involvement into ear and hearing care (EHC). This policy brief intends to explore the hearing health inequalities and their determinants in Malaysia, and to suggest several policy interventions through greater community engagement in our National Ear and Hearing Care (NEHC).

Urgent Call For Action!

The suggestions call for attention, collaboration and action between government ministries such as Ministry of Health (MOH), Ministry of Education (MOE) and Ministry of Women, Family and Community Development (MWFCD).

THE CURRENT SITUATION: WHERE ARE WE NOW?

Newborn hearing screening programme is an important early intervention for hearing loss. In 2014, published report recorded 36 public hospitals under MOH implemented newborn hearing screening programme (5). The report pointed that limited manpower and hearing resources hampered satisfactory implementation of screening programme, where only 68% coverage rate recorded. High percentage of loss to follow up (33.4%) also indicated loss of opportunity to address the hearing loss problem at initial point of age, potentially causing greater disparity in terms of hearing health at later ages in the future (5). One study revealed that lack of awareness from caregivers attributed to the low uptake of hearing screening programme, as they deemed that the babies are too young for hearing test (6). Moreover, low socio-economic position pushed them to prioritize earning of living rather than attending for hearing test appointments (6).

As for elderly population, a study in 2020 revealed that prevalence of hearing loss among elderly group (aged more than 60 years old) in Malaysia stood at 6.4% (7). This study provided a glimpse of crucial determinants of hearing health inequalities. Firstly, rates of hearing loss in rural areas recorded higher percentage compared to group resided in urban areas. Rural areas had to endure limited accessibility and availability of hearing health facilities, and lower hearing health awareness compared to urban group, resulting in noticeable disparity in terms of prevalence between the two areas.

Education level also showed distinct pattern where highest prevalence occurred in no formal education group, followed by primary, secondary and lastly tertiary education. It is postulated that lower education level equals to lack of awareness and knowledge regarding hearing health. This will also hinder the health-seeking behaviours if hearing discomforts occurs at any stage of life (7).

Those in lower income group (less than RM1000 monthly) was also the most affected in this study. They appeared as vulnerable group, as lower income limited their ability to receive proper health screening (7). More vulnerable demographic characteristics illustrated in Table 1.

Based on these findings, hearing health inequalities exist in Malaysia and it has severely threatened the most vulnerable population; children, elderly, lower socio-economic group and lower education group. This is in accordance with the conceptual model of hearing health inequalities presented by Tsimpida (4), and requires urgent actions to be taken at national level.

Table 1 Demographic characteristics and prevalence of hearing disability among older persons (≥60 years) in Malaysia (n = 3965)

Sociodemographic characteristics	Older persons aged ≥60 years		
	Unweighted count	Estimated population	Prevalence (%), 95% CI
Malaysia	235	3 015 629	6.4 (5.00–8.26)
Strata			
Urban	83	147 213	6.2 (4.45–8.70)
Rural	152	60 399	7.0 (5.32–9.09)
Sex			
Male	126	99 045	6.3 (4.91–7.98)
Female	109	108 568	6.6 (4.23–10.17)
Marital status			
Married	137	125 070	5.7 (4.47–7.27)
Never married/separated/divorced/widowed	98	82 543	8.0 (5.46–11.58)
Highest education level			
No formal education	84	52 932	11.3 (8.38–15.04)
Primary education	117	100 446	7.2 (4.67–10.83)
Secondary education	32	49 841	4.8 (3.00–7.56)
Tertiary education	–	–	–
Employment status			
Employed	34	22 625	2.9(1.66–4.98)
Unemployed/retiree/homemaker	201	184 988	7.6 (5.79–9.88)
Individual monthly income (RM)			
<1000	169	152 995	8.3 (5.95–11.44)
1000–1999	43	34 299	5.0 (3.50,7.16)
≥2000	17	15 778	2.4(1.44–4.13)

Adapted from Harith AA, Ahmad NA, Sahril N, Wahab NA, Kassim NA, Othman S, et al. Prevalence and determinants of hearing disability among older persons in Malaysia: Finding of National Health Morbidity Survey (NHMS) 2018. Geriatr Gerontol Int. 2020;20 Suppl 2:43-8.

National Ear and Hearing Care Initiative: How Do We Progress?

In 2018, Malaysia has started the initiative to develop National Ear and Hearing Care (NEHC) policy through the efforts of Medical Development Division of MOH. NEHC targets three main areas for improvement; awareness, financial and workforce. This initiative appeared as the first structured national policy to address hearing health inequalities. However, NEHC still under planning phase and put emphasis on strengthening the earlier programmes such as neonatal hearing screening, hearing aids procurement, and improving the training of EHC personnel. The committee noticed future challenges such as ensuring the accessibility of EHC at every level of facilities, financial burden and raising awareness to the satisfactory level (8).

This policy brief aims to advocate intervention on hearing health illiteracy due to lack of awareness and stigmatization. Improving hearing health literacy could lead to raising awareness to reduce the inequalities, and this could be achieved through incorporating greater community engagement approach into our existing NEHC.

RECOMMENDED ACTION: NEHC TOWARDS GREATER COMMUNITY ENGAGEMENT

NEHC could be strengthened by incorporating greater community engagement to increase hearing health literacy, and this requires eco-social model and multilevel perspectives. Eco-social model is chosen to provide comprehensive solution due to complex interplay between roles of determinants, ranging from individuals, families, society, healthcare services, and government. Greater community engagement in NEHC can stimulate cooperation and collaboration between agencies, by focusing into three domains; awareness, education and support (9). These domains aim to improve hearing health literacy and overcome stigmatization about hearing loss.

Awareness: Deaf Role Models

To raise awareness, it is suggested to mould role models to convey accurate hearing health messages to the public. United States implemented Deaf Role Models programme to help families with hearing loss for early intervention services. Deaf role models are coming from deaf community and trained to deliver support to the families who have children with hearing impairment. Special activities conducted for the families to expand networking and support, and to provide opportunity to learn sign languages. Through the session, parents able to realize and unearth the potential of their children. The programme yielded promising success as the language outcomes of deaf infants were improved and public awareness on hearing loss also increased (1). This programme needs to be replicated in our NEHC to overcome hearing loss stigma via community empowerment, subsequently shifting our public awareness to a greater height.

Education: National Campaign

Education plays significant role to raise hearing health literacy among society. For instance, Canada launched National Campaign for Better Hearing to raise awareness and provided access to hearing assessment for elderly citizens. This campaign offered free hearing tests, hearing aid check-ups and explanation about hearing technologies. For younger age group, the focus should aim to introduce early education about hearing health and dangerous noise. Several international universities had collaborated in 1999 to develop Dangerous Decibels programme for primary schools to explain about noise-induced hearing loss and tinnitus (9). This programme offered a structured educational information to be delivered effectively among school-aged children and proven to improve the knowledge of hearing loss among them (10). MOE can adopt the programme for annual implementation, to ensure continuous reach of hearing health awareness particularly at early ages. This programme also proved that academic community engagement is vital to benefit the society.

Support Group: Community Health Workers

Support group for healthcare providers also emerges as important point of intervention to deliver optimized hearing healthcare services. Therefore, it is important to establish community-based support groups for healthcare professionals in EHC. This community-based support groups comprise of community health workers (CHWs) to help reducing the burden of our healthcare professionals. In WHO Region of Americas, CHWs has been trained under Primary Ear and Hearing Care Training Resources (PEHC-TR) which includes modules for conducting awareness programme, performing basic early diagnosis and management of hearing loss, and providing referrals to hearing specialist services (1). This is contributing to the task-sharing of delivering hearing health services. The programme is a proven success in Brazil, where CHWs able to accomplish health promotion campaigns and surveillance-related tasks, which led to the upgrading community knowledge about hearing loss. In our context, Ministry of Women, Family and Community Development should take the opportunity to identify CHWs support group among the community, and replicate the programme to collaborate with MOH. It is expected that this programme will help to relieve the burden mounted to our limited healthcare resources, for the sake of delivering the optimum health hearing services.

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CONCLUSION

Hearing health inequalities in Malaysia should be intervened through a holistic, multilevel approach in our existing NEHC. One of the most crucial approaches to ensure comprehensive EHC is to engage a wider community involvement, in order to raise hearing health literacy through awareness, education and support. This policy brief emphasizes on this critical part based on the evidences around the globe, to fight inequalities particularly among vulnerable groups, aiming for effective and successful implementation of NEHC.