




Dikir Farmasi: folk songs for health education

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ABSTRACT

In an effort to enhance public awareness, we develop Dikir Farmasi as an innovative approach to deliver health information. Dikir Farmasi combines the elements of dikir barat (a type of traditional folk song rhythm) and traditional sketches which are popular in the state of Kelantan, Malaysia. These sketches and dikir barat rhythmic songs, with lyrics touch on issues such as drug abuse and regulation are presented in an entertaining and humorous way. Health promotion messages are disseminated using Dikir Farmasi in the form of compact disks, video compact disks, stage performance, exhibition, social media, printed media (signboard, brochure and flyer).

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Introduction

Kickbusch has coined the term *Health Literacy* that encompasses all health promotion efforts. Health literacy is defined as *implying the achievement of a level of knowledge, person skills and confidence to take action to improve personal and community health by changing personal lifestyles and living conditions* (Kickbusch, 1997, 2001). Adhering to the concept of health literacy, all health promotion endeavours must be implemented in the most effective and efficient way in order for the objectives to be accomplished. A variety of educational strategies, including audiovisual entertainment such as storytelling, sketches and video have been invaluable tools in promoting the knowledge and seeking to change or adapt beliefs and attitudes of the people in the context of health promotion (Ackerson & Viswanath, 2009).

In addition to storytelling, sketches and video, music is another effective method for education through entertainment. Music as a form of art, is a medium by which people's identities, and their values, beliefs and perceptions of the world, can be expressed and explored (Schafer & Sedlmeier, 2009). Many health promotion programmes, therefore, have employed music to enhance the impact of health promotion, whether through enhancing knowledge, emotional and social well-being or establishing healthy behaviour as the social

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norm (Davidson & Faulkner, 2010; Hampshire & Matthijsse, 2010; Rimer & Brewer, 2015; Ryerson, 2008).

An example of education-entertainment in health promotion is the use of Kalajatha, a form of traditional Indian folk theatre, as a medium for health promotion in the context of the control of malaria in rural areas of India (Ghosh, Patil, Tiwari, & Dash, 2006). In another example, traditional folk songs (lam) in Laos have been shown to be effective in providing knowledge of HIV/AIDS, teaching preventive skills and motivating listeners towards changing their behaviour with respect to disease prevention (Yoshida, Kobayashi, Sapkota, & Akkhavong, 2012).

Dikir Farmasi: rationale and goals

Dikir barat is a form of music that is popular in Malaysia, especially in the state of Kelantan. It is performed in groups, usually consisting of 10–15 persons, and involves choral singing with musical instrument accompaniment (Bujang, 2005). Traditionally, dikir barat was usually performed during harvest seasons, weddings or festive celebrations. Nowadays, however, dikir barat is not merely a form of entertainment but has also been utilized as a vehicle for social commentary, to stimulate discussion on current issues and scenarios and even to educate (Brennan, 2001). For example, as early as in the 1990s, dikir barat had been featured as a health promotional tool to disseminate information on the spread of HIV and dengue fever. In this case, a 10-min dikir barat session with lyrics describing the damaging effect of HIV and dengue fever was employed to create awareness about disease prevention. Under the influence of some political parties, however, certain groups of people have argued that the public might sometimes perceive dikir barat as a government-sponsored, or sanitized, version of a theatrical form. Furthermore, the antagonists of dikir barat reckon that it is used to change the current drug seeking behaviour that is more prone to traditional medicine that largely remains unregistered with the health authority.

Pharmacy Enforcement Division (PED) is an enforcement agency under the auspices of the Ministry of Health (MOH) Malaysia and is responsible for regulating the manufacture, importation, supply, sale, transportation, distribution, storage, ownership, management, advertisement and consumption of pharmaceuticals, cosmeceuticals and health products. The promotion and advertising of medicinal, cosmetic and health products in Malaysia are strictly controlled by the Medicines (Advertisement and Sale) Act of Malaysia (Ministry of Health Malaysia, 1990). Furthermore, the pharmaceutical industry is self-regulated under its umbrella organization of the Pharmaceutical Association of Malaysia. Marketing activities should conform to the Code of Pharmaceutical Marketing Practices for Prescription (Ethical) Products and Code of Conduct for Non Prescription (OTC) Products (Pharmaceutical Association of Malaysia, 2015a, 2015b). Furthermore, a comprehensive ethical framework for good governance in medicine has been fully integrated into current public pharmaceutical practice, especially in the five core areas, namely: drug procurement, promotion, selection, registration and inspection of manufacturers (Malaysia Pharmaceutical Services Divisions, Ministry of Health, 2009) With all these measures being strictly enforced by the drug control authority malpractice and unethical marketing techniques, such as promotional spending, sponsorship and bribery, have been minimized (Masood, Ibrahim, Hassali, & Ahmed, 2009).

The Prevention and Consumer Awareness Unit (PCAU) is one of the units established under the purview of Kelantan PED. It is responsible for consumer education and for handling complaints. In an effort to enhance public awareness on correct use of medicine, PCAU has initiated the *Dikir Farmasi* (DF) music album as an innovative approach to deliver health information; in other words, it is intended as a neutral educative tool and is explicitly not a marketing effort. DF combines the elements of a type of traditional rhythm, *dikir barat* and traditional sketches which are popular in the state of Kelantan, Malaysia. Literally, *farmasi* is the Malay language word for pharmacy. The music album was produced in June 2011 and officiated in the same year by the Director of Pharmacy Enforcement of Malaysia. It is produced in the form of compact disks (CDs) and video compact disks (VCD). The album, entitled "Let's use registered medicine", consists of four sketches namely "Processing of illegal drugs", "Introduction to the service of the enforcement unit", "Registration of medication", and "Illegal cosmetics", as well as three *dikir* songs namely "Understanding the service of pharmaceutical services"; "Know your medication", and "Drug information" (Refer to supplementary file). These sketches and *dikir* songs touch on the issues of drugs and cosmetics regulation in an entertaining and humorous way. The target audience of the album is mainly Kelantanese people regardless of demographics. This innovative project has garnered wide coverage from the local newspapers, *Sinar Harian*, *Berita Harian*, *Utusan Malaysia* and *The Star* (Refer to supplementary file). Besides that, it has received support from the electronic media. The governmental radio channel Kelantan FM has broadcast excerpts of the songs and sketches from the album. Similarly, the private radio channel Manis FM, which has listeners from three states; Kelantan, Terengganu and Pahang, has also helped to promote the album. The album is also being actively promoted through alternative media, such as Facebook and YouTube. A supermarket chain also plays the CD in all four of its branches in Kelantan. Finally, the album is being played in private buses and taxis through cooperation from bus and taxi business owners.

In terms of distribution, the Kelantan Health Department has played a major role by distributing the album to all 287 health facilities throughout Kelantan. It is played in the waiting areas within these facilities, such as in clinics and pharmacies. The album has also been distributed to other government agencies such as the Ministry of Defence, the Election Commission of Kelantan, and the Department of Information, among others. In addition, the distribution covers educational institutes in Kelantan such as Universiti Malaysia Kelantan and Universiti Teknologi MARA Kelantan. The public can also access tracks from the album through the www.pharmacy.gov.my and www.farmasikit.gov.my websites. There is also merchandise available to further promote DF in the form of mugs and T-shirts. For the tech-savvy, DF also has its own mobile apps available for free from Google Play.

The driving force behind DF

PCAU has always been active in implementing activities under the PED Malaysia. These activities include exhibitions, talks and dialogues. These activities are often deemed to be quite formal, however, and the responses were not encouraging. In particular, such formal activities are also seen to be more suitable for only certain groups of people, especially the more educated ones. Besides that, the rural nature of much of Kelantan means that there are geographical challenges for the PED to reach all areas within the state. For example, travelling time, accommodation, and overtime allowances for support staff have hindered

the ability of the PED to implement consumer protection activities in rural areas such as the district of Jeli and Gua Musang. In addition, the lack of human resource is a limitation. PED only has 20 Pharmacy Enforcement Officers, and these also have to do other enforcement activities such as intelligence, investigation, prosecution, inspection, licensing and frontier monitoring activities.

The level of awareness regarding regulation and the features of registered drugs remains low among the public and not many people are aware of the roles played by Kelantan PED. The number of people attending the exhibitions, talks and dialogues is often low and limited to the areas where the programmes are held. Consequently, important health protection messages do not reach all areas of Kelantan. This situation warrants a new and more efficient mechanism for better delivery of information to a wider target audience.

Benefits of DF

Wider coverage in a shorter time

Normally, the frequency with which conventional activities such as talks and exhibitions can be undertaken is limited (ie twice a month). Conventional methods such as lectures and exhibitions are also usually only able to disseminate a message to an audience of 100–300 people at a time. By broadcasting this innovative project via Kelantan FM Radio and Manis FM, such constraints could be overcome. In this case, the programme's messages could be disseminated to a wider audience, with an estimated number of listeners totalling 1.3 million (Kelantan FM broadcasts to up to 0.9 million listeners across a number of districts in Kelantan and Terengganu, while Manis FM has up to 0.4 million listeners in Kelantan, Terengganu and Pahang).

Coverage in the newspaper Sinar Harian also enables the message to be conveyed to 100,000 readers daily throughout Kelantan, without requiring the presence of enforcement officers on the field.

In addition, the broadcasting of DF every day at four branches of the Mydin supermarket chain in Kelantan allows messages to be delivered to more than 10,000 shoppers. The broadcasting of the album in 287 health facilities throughout the state can cover a large audience since these facilities have large numbers of visitors every day. In conclusion, the use of mass media is in line with the recommendation of World Health organization for disease control and health education (World Health Organization, 2014). Compared to conventional methods, substantial time savings can be achieved through the delivery of messages more frequently to a much larger audience at one time.

Operational cost savings

This innovative project has saved the costs incurred by the department when carrying out conventional methods of talks and exhibitions. The cost of undertaking exhibitions in all 100 health facilities in several districts in the state of Kelantan is approximately 101,650 Malaysian Ringgit (equivalent to USD 23,681). Most of these costs can be saved, however, by showing the DF in all these facilities without having to do formal exhibitions. It is also very practical since the DF can be watched every day in these premises, unlike exhibitions that are not practical to be held on a daily basis.

In addition, the album also leads to cost-savings in terms of advertising because it receives wide coverage without any charge from the press. For example, the cost of a half-page advertisement in the Sinar Harian newspaper is RM 3000 (equivalent to USD 700) but the album has been featured in the newspaper on five occasions, saving RM 15,000 (equivalent to USD 3495).

The sketches from this album are also broadcasted through Kelantan FM radio free of charge at least three times per week. In line with technological developments, the project is also disseminated in social media, and has a huge following on YouTube (Refer to supplementary file). Overall, songs and sketches from this album have been watched thousands of times as of August 2015. By these means, the delivery of information can be optimized without incurring any additional costs. Future economic evaluation to assess the efficacy of *dikir farmasi* should be undertaken to confirm the long-term cost savings as a health education tool offered by the *dikir farmasi* programme.

Reduced human resource requirements

Normally, for carrying out talks or exhibition activities, at least three PED officers and three support staff are required on each occasion. The process of delivering this information should be continuous so that it is accessible to all levels of society. Since the number of exhibitions conducted is directly proportional to the number of members involved, if wide coverage is to be achieved by traditional means there would need to be a significant increase in the human resources made available. Furthermore, this innovative means of delivery allows existing human resources to be focused more exclusively on other enforcement duties, such as inspections, raids, border monitoring and so on. Lieberman et al. proposed the term “structural approach” to describe modifications such as policy change and community empowerment which lead to better health-related decisions. In this case, the human resource structure of the PED was strengthened because the DF initiative has been supported at the ministerial and co-worker levels to transform the health seeking behaviour of the general public (Lieberman, Golden, & Earp, 2013).

Electronic media

Since the album is formatted in VCD and CD formats, it is very easily propagated in that PED Kelantan only have to provide a VCD or CD to radio stations, supermarkets, bus and taxis firms, and shopping centres for broadcast on their premises. This project can also be uploaded to alternative media such as websites and social networking sites such as Facebook and YouTube. In addition, the project is also more environmentally friendly than the conventional means of circulating brochures or pamphlets since a single VCD can be used repeatedly, reducing the use of paper materials for the purpose of making brochures or pamphlets.

Potential barriers faced by DF

One of the potential barriers faced by DF is the tendency for listeners to regard it as entertainment rather than as a medium of education. This can be due to the distraction from the accompanying background music that prevents the listeners from capturing the messages contained in the lyrics.

The components of DF, namely the dikir songs and sketches are presented in the local Kelantanese dialect, which could also be a potential language barrier. If it is intended for DF to be introduced or promoted to other parts of the world, but more time and money are required in order to provide translations.

In addition, no pilot study was undertaken to assess the popularity of the components in DF across the target groups. For example, as a form of entertainment, dikir barat may not be favoured by certain groups, such as children and teenagers. Children may have problem deciphering the poetic language of dikir barat songs, and teenagers or young adults may not be interested in dikir barat since it is a form of traditional entertainment. Other factors such as target areas (urban or rural), ethnicity, and level of education may also influence the popularity and effectiveness of DF across the heterogeneous demographics of the target group.

Conclusions

DF has opened up a new front in the efforts to expand and intensify the dissemination of knowledge and information about the regulation of drugs and cosmetics. The juxtaposition of elements of entertainment and comedy with an educational message enable important health promotion messages to be communicated in a more interesting and casual way. More research needs to be done, however, to analyse the actual impacts of DF and to evaluate its effectiveness vs. its cost. This initiative may offer a useful template that needs to continue to be explored in other contexts worldwide.

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References

- Ackerson, L. K., & Viswanath, K. (2009). The social context of interpersonal communication and health. *Journal of Health Communication, 14*(Suppl. 1), 5–17. doi:<http://dx.doi.org/10.1080/10810730902806836>
- Brennan, C. (2001). Religion, cultural identity, and Kelantan's Dikir Barat. *The Australian Journal of Anthropology, 12*, 302–311.
- Bujang, R. H. (2005). Continuity & relevance of Malay traditional performance art in this millenium. *Jurnal Pengajian Melayu, 15*, 220–231.
- Davidson, J. W., & Faulkner, R. (2010). Meeting in music: The role of singing to harmonise carer and cared for. *Arts & Health, 2*, 164–170.
- Ghosh, S. K., Patil, R. R., Tiwari, S., & Dash, A. P. (2006). A community-based health education programme for bio-environmental control of malaria through folk theatre (Kalajatha) in rural India. *Malaria Journal, 5*, 123.
- Hampshire, K. R., & Matthijisse, M. (2010). Can arts projects improve young people's wellbeing? A social capital approach. *Social Science & Medicine, 71*, 708–716.
- Kickbusch, I. (1997). Think health: What makes the difference? *Health Promotion International, 12*, 265–272.
- Kickbusch, I. S. (2001). Health literacy: Addressing the health and education divide. *Health Promotion International, 16*, 289–297. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/11509466>
- Lieberman, L., Golden, S. D., & Earp, J. A. L. (2013). Structural approaches to health promotion: What do we need to know about policy and environmental change? *Health Education & Behavior, 40*, 520–525. doi:<http://dx.doi.org/10.1177/1090198113503342>
- Malaysia, P. S. D. M. o. H. (2009). *Framework for good governance in the public pharmaceutical sector* (1st ed.). Retrieved December 10, 2015, from <http://apps.who.int/medicinedocs/documents/s17799en/s17799en.pdf>
- Masood, I., Ibrahim, M., Hassali, M., & Ahmed, M. (2009). Evolution of marketing techniques, adoption in pharmaceutical industry and related issues: A review. *Journal of Clinical and Diagnostic Research, 3*, 1942–1952.
- Ministry of Health Malaysia. (1990). *Medicines (Advertisement & Sale) Act 1956 and Regulations (Act 290)*. Retrieved December 10, 2015, from <http://www.pharmacy.gov.my/v2/en/documents/medicines-advertisement-sale-act-1956-and-regulations.html>
- Pharmaceutical Association of Malaysia. (2015a). PhAMA code of conduct for non prescription (OTC) products. Retrieved December 10, 2015, from www.phama.org.my/index.cfm?&menuid=12#sthash.030wIxUP.dpuf
- Pharmaceutical Association of Malaysia. (2015b). *PhAMA code of pharmaceutical marketing practices for prescription (ethical) products* (19th ed.). Retrieved December 10, 2015, from <http://www.phama.org.my/index.cfm?&menuid=10#sthash.RYD7bd9W.dpuf>
- Rimer, B. K., & Brewer, N. T. (2015). *Chapter 4 introduction to health behavior theories that focus on individuals*. San Francisco, CA: Jossey-Bass.
- Ryerson, W. N. (2008). The effectiveness of entertainment mass media in changing behavior. *Population Media Center*. Retrieved from: <http://www.populationmedia.org/wp-content/uploads/2007/08/EFFECTIVENESS-OF-ENTERTAINMENT-EDUCATION-012609.pdf> [accessed May 2016].
- Schafer, T., & Sedlmeier, P. (2009). From the functions of music to music preference. *Psychology of Music, 37*, 279–300.
- World Health Organisation. (2014). Fact sheets on environmental sanitation: 4.10: Using the mass media for hygiene education. Retrieved December 12, 2015, from http://www.who.int/water_sanitation_health/hygiene/emergencies/fs4_10.pdf
- Yoshida, I., Kobayashi, T., Sapkota, S., & Akkhavong, K. (2012). Evaluating educational media using traditional folk songs ('lam') in Laos: A health message combined with oral tradition. *Health Promotion International, 27*, 52–62.