Research Article



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Explaining Causes Of Inequity In Public Health : A Narrative Review

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Abstract

Objectives: This paper attempts to explain the term inequity in public health based on The Rainbow Model introduced by Dahlgreen & Whitehead (1991) and The Social determinant of Health (SDH) framework of the Commission of Social Determinants of Health).

Methods: The author applied a narrative review and examined 29 relevant English literatures and found two themes.

Results: First, Explanation of The Rainbow Model' introduced by Dahlgreen & Whitehead (1991) and The SDH framework of the Commision of Social Determinants of Health. Second, the perspective of traditional public health emphasizes the proximal determinants while New Public health emphasis on intermediate determinants and distal determinants.

Conclusions: Therefore, as a public health professional need to consider about proximal, intermediate and distal determinant of public health issue.

Keywords: Social determinant, Inequity, Health, Proximal, Intermediate, Distal

INTRODUCTION

Inequity has been a major issue for public health professional. The question which arises here is, what are the causes of this inequity? This paper will attempt to answer that question by providing an explanation from two perspectives -, old or traditional public health and new public by using The Rainbow Model healthintroduced by Dahlgreen & Whitehead (1991) and The Social determinant of Health (SDH) framework of the Commision of Social Determinants of Health). This paper will be presented in two sections which are The Rainbow Model and SDH framework of the Commision of Social Determinants of Health and understanding inequity traditional and new public health.

METHOD

The author applied a narrative review method. As such, this paper was obtained from reviewing 29 English literature, book article and grey literatures. They were examined based on their relevancy to the topic and analyzed descriptively. As such two themes emerged in this review are explaining the Rainbow model and SDH framework of the Commision of Social Determinants of Health and explaining inequity. Examples regarding maternal mortality in Indonesia were chosen to broad our understanding to this topic.

RESULTS

The Rainbow Model and SDH framework of the Commision of Social Determinants of Health .

The Rainbow Model' introduced by Dahlgreen & Whitehead (199) explains 4 layers of determinants of health beginning at the 'individual life style, and progressing through social and community factors, living and working conditions and general socioeconomic factors', commonly called Social



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Determinants of Health¹. Similarly, this is shown in The SDH framework of the Commision of Social Determinants of Health which consists of 4 boxes - the first box from the right side is 'distribution of health and well-being which is influenced by the three other boxes on the left side, which are, the proximal determinants, intermediate determinants, and distal determinants'.

The proximal determinants is 'any determinant of health that is readily and directly associated with the change in health status such as life style and behavioural factors'. Intermediate determinants of health are 'the material factors including personal wealth or access to material resources, the natural, physical and built environment; and the health system input including access to health care'. Distal determinants of health 'include the national, institutional, political, legal and cultural factors that indirectly influence health by acting on the more proximal determinants'².

From these frameworks, it can be concluded that, old or traditional public health focused on an individual approach favouring medical and clinical intervention as well as vertical programs implemented by the government while population approach is more favoured in new public health because it deals with social determinants of health which require involvement of all community^{2 3 4}. Social determinants of health, that is the factors 'in which people live and work'¹. are used to decide whether an inequality is inequity or not whether and whether the differences are fair or not^{5 6 7}.

Explanation of inequity : Traditional and New Public Health.

The perpective of traditional public health emphasizes on the proximal determinants, which says that this inequity is understood as stemming from the behaviour of women in rural areas who prefer home delivery and Traditional Birth Attendants (TBAs) rather than health

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professionals service. As well as the lack of health professionals working in the village and their behaviour, because they often leave the village⁸, for this has also contributed directly to the low rate of delivery in a health facility. As such, since 1989, the Indonesian government has decided to distribute midwives in all villages in Indonesia - this is called Village Midwife Program¹⁰¹¹. At the time, the government trained and posted 54,000 midwives to all villages in Indonesia resulting in increasing the density of midwives from 0.2 in 1989 to 2.6 per 10,000 population in 1996^{12} . However, as critized by Hatt et al (2007) the presence of a midwife in the village is less beneficial because of their limitation to deal with emergency obstectric care and caeserian section, skills which are pivotal to deal with birth complications as recommended by WHO³. Moreover, study shows that not quite 30 per cent of deliveries in rural areas occur in a health facility¹³. Therefore, I would argue that placement of midwives in all villages cannot guarantee that the women will use the health facility to deliver, creating high risk of maternal mortality.

New Public health gives a different understanding of this inequity with its emphasis on intermediate determinants and distal determinants.

In terms of intermediate determinants, it is argued that this inequity may be because women in the rural areas face a cultural barrier regarding their autonomy in health seeking behaviour as this depends on their husband and mother in law or other relatives¹⁴. Α status caused by the implementation of patriachy and matriachy in Indonesia's social system¹⁵. Additionally, hierarchical relationship, for example. showing respect to one's elders and relationship which collectivist values cohesion, obligation and duty¹⁶ might be a challenge for a woman in a rural area to make a decision even for her own self.

Furthermore, pregnancy and delivery have traditional values which makes the



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Traditional Birth Attendant more preferable than a health professional as the example shown in Analen¹⁷, illustrates whereby 'TBA will bring the pregnant woman to deliver in the middle of the forest, cut the umbilical cord with bamboo, and clean the baby with guava leaves'. This belief and practice is opposite with that of the modern or biomedicine approach⁷. Which is probably mostly adopted by Western and urban people for whom a health facility is more favourable.

What is more, the physical environment in rural areas is not conducive for attracting health professionals due to poor roads and inadequate health facilities and infrastructure where they are working 18 . Members of the Community also had trouble with the geographic conditions as Mukherjee (2006) contends people in rural areas have to provide additional cost for transportation to reach a health facility located in district¹⁹. In addition, unaffordable prices for delivery services whereby people have to spend 3-26 per cent of their annual household income for normal delivery services and 90-138 per cent for delivery with complications such as caesarean section^{20 21}. make the use of professional services prohibitive. It is too expensive for poor people who living in rural areas because according to the World Bank (2006), 75 per cent of their income is spent on food.

In terms of distal determinants, the government and the international institutions have an important role in this case. To accommodate equity in all areas in Indonesia, the Indonesian government, based on Law No. 22, in 1999 began to implement decentralization²⁰, which according to Green²² is, 'a process where authority to make decisions is given to lower levels within a health system'. However, The SMERU Research Institute indicates this was mis leading of the local goverment because there was insufficient distribution of health professionals in remote areas, an increasing service fee in the community health centre, and there is no corresponding budget given

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to the community health centre with the planning. This situation is similar to that argued by Robinson that decentralisation is inadequate to deliver health services equally in the community if this in place of adequate national budget spent in the health sector. Additionally, because of low salary levels the Indonesian goverment allows health professionals working in the public sector to have additonal work in private sectors²³. Causing them to be less interested in working in the village, particularly due to the unsatisfactory salary as well as lack of opportunity regarding sustainability of their career, and prospects of promotion and retirement¹⁰. Another distal determinant comes from global institutions such as The International Monetary Fund (IMF) and The World Bank with their neoliberalist ideology insisted on as a condition when the Indonesian goverment negotiated for a loan in the Asian crisis in 1997^{24 25}. This meant, the Indonesian goverment has to cut public expenditure and offer public services to the private sector^{7 26 1 27}. The private sector uses a consumer approach in delivering their services which means the services are provided for those who can buy it^{28} . Therefore, it could be argued that private sector practice is preferred by health professionals but is unaffordable to poor and rural people.

CONCLUSION

Maternal mortality is a major problem in developing countries including Indonesia with the high rate of 220 per 100,000 life births²⁹. Equitable health services are neccesary to ensure that all pregnant women have safe delivery to reduce the risk of maternal mortality. However data shows that there is discrepancy in the utilization of health facility for delivery between urban and rural areas which account for 80 per cent 47 per cent of the population and respectively. The question arises here, what are the causes of this inequity? To answer this question, The Rainbow Model

introduced by Dahlgreen & Whitehead (1991) and The SDH framework of the Commision of Social Determinants of Health² are used to explain the shifting of understanding of inequity between traditional public health perspectives and new public health perspectives.

On one hand, the perspective of traditional public health emphasizes the proximal determinants, which means this inequity is understood to stem from the behaviour of women in rural areas, women who prefer home delivery and Traditional Attendants Birth (TBAs) to health professionals' service. As well the lack of health professionals working in the villages and their behaviour which means they often leave the village also contributes to inequity. As such, the Indonesian government decided to train and post midwive in all villages in Indonesia. However, this program has some limitations in the quest to reach equity between rural and urban areas.

On the other hand, the perspective from new public health emphazises intermediate determinants and distal determinats. In intermediate determinants, I looked at cultural and physical environments as well as poverty influencing the utilization of health service, and also the interest of health professionals to work in the village. Furthermore, in the area of distal determinants, I explained about the role of the government in creating inequity in terms of decentralisation and the dual practice of health professionals both in the public sector and the private sector, impacting in the utilisation of health facility for birth delivery in rural areas. Furthermore, the international institutions and their neoliberalism approach impact by creating an increase of private sectors which is advantageous for health professionals but unaffordable for poor and rural people due to its consumers pays approach.

Broadly speaking, from the example of The Rainbow Model introduced by Dahlgreen & Whitehead (1991) and The SDH framework of the Commision of Social Determinants of Health, inequity is understood and produced not only from proximal determinants but also there is a large contribution from intermediate and distal determinants. As such, intervention from a purely medical approach is not enough to address inequity but needs population based programs which are more favourable for the whole populations, as well as a strong commitment from the national government international and the institutions.

REFERENCES

- 1. World Health Organization.2010. Action on the social determinants of health : learning from previous experiences.
- 2. Keleher H. 2011., Understanding Health, 3rd edn, Oxford University Press, Melbourne.
- 3. Walley J. & Gerein, N 2010, ' Maternal, neonatal, and child health', in Walley, J & Wright, J (eds), *Public Health an action guide to improving health*, 2nd edn, Oxford University Press, New York, pp. 181-212
- 4. Nettleton S.2006. The Sociology of Health and Illness, 2nd edn, Polity Press, UK.
- Kawachi I, Subramanian S V.2002. Almeida-Filho N. A glossary for health inequalities. Vol. 56, Journal of Epidemiology and Community Health. p. 647–52.
- Braveman P, Gruskin S. 2003. Defining equity in health. J Epidemiol Community Health. Apr 1;57(4):254– 8.
- 7. Baum F.2008. The New Public Health, 3rd edn, Oxford University Press, Melbourne.
- 8. Titaley CR, Hunter CL, Dibley MJ,



e- ISSN: 2715-4718

Heywood P. 2010. Why do some women still prefer traditional birth attendants and home delivery?: A qualitative study on delivery care services in West Java Province, Indonesia. BMC Pregnancy Childbirth.

- 9. Agus Y, Horiuchi S, Porter SE.2012. Rural Indonesia women's traditional beliefs about antenatal care.
- 10. Ensor T, Quayyum Z, Nadjib M, Sucahya P.2009. Level and determinants of incentives for village midwives in Indonesia. Health Policy Plan.
- Weaver, EH, Frankenberg, E, Fried, BJ, Thomas, D, Wheeler, SB & Paul J.2013. Effect of village midwife program on contraceptive pervalence and method choice in Indonesia. Stud Fam Plann. vol.44(4).page 389–409.
- 12. Shankar & JF.2008. The villagebased midwife programme in Indonesia. Lancet. vol.371: page 1226–1229.
- Japan International Cooperation Agency (JICA). 2011. Country Gender Profile: Indonesia Final Report PPD JR 11-004.
- Akbar, M. I., Rachman, W. O. N. N., & Risky, S. (2020). Factors relating to the performance of health workers in abeli city health center, kendari city: Performance of health workers. Indonesian Journal Of Health Sciences Research And Development (IJHSRD), 2(1), 9-14.
- Gabrysch S, Campbell OMR.2009. Still too far to walk: Literature review of the determinants of delivery service use. BMC Pregnancy Childbirth.
- 16. Novera.2004. Indonesian Postgraduate Students studying in Australia: An

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examination of their academic, social and cultural experiences. Int Educ J.

- Analen C. 2007.Saving mother's lives in rural Indonesia'. *Buletin of the World Health Organization*, vol. 5, no. 10, p. 740
- Akbar, M. I. (2020). Analysis Of The Needs Of General Practitioners In Public Health Centers Using Health Workload Method. Public Health of Indonesia, 6(2), 63-9.
- 19. Suryahadi, A. Yumna, UR. Raya, DMA.2010. Review of Government's Poverty Reduction Strategies, Policies, and Programs in Indonesia. *Research Report*, SMERU Research Institute, Jakarta.
- Hatt L, Stanton C, Makowiecka K, Adisasmita A, Achadi E, Ronsmans C. 2007. Did the strategy of skilled attendance at birth reach the poor in Indonesia? Bull World Health Organ. p. 774–82.
- 21. Houweling TAJ, Ronsmans C, Campbell OMR, Kunst AE.2007. Huge poor-rich inequalities in maternity care: An international comparative study of maternity and child care in developing countries. Bull World Health Organ.
- 22. Green A.2010. Health policy and systems', in Walley, J & Wright, J (eds), Public Health an action guide to improving health, 2nd edn, Oxford University Press, New York, .

- 23. The World Bank. Investing in Indonesian Health : Challenges and opportunities for future public spending. 2008;
- 24. Sharma S. 2003. The Asian Financial Crisis: Crisis, Reform and Recovery, Manchester University Press, Manchester and New York.
- 25. Chandra AC.2011. A Dirty Word? Neo-liberalism in Indonesia's foreign economic policies. Trade Knowledge Network, Southeast Asia.
- 26. Navarro V. 2009. What we mean by social determinants of health. Int J Heal Serv. Vol. 39, No. 3, p. 423-441
- 27. Desai R. 2012. Introduction to international development : Approaches, Actors, and Issues, 2nd edn, Oxford University Press, Canada. p.46–67.
- 28. Jim Simpson Consultanc.2014. Healthy Partnerships Checklist Empowerment tools-1 Empowering People and Healthy Partnerships [Internet] Available from: www.jimsimpsonconsultancy.co.uk
- 29. UNDP. 2013. Human Development Report 2013 The Rise of the South: Human Progress in a Diverse World. New York, USA