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Social support in restoring sight after cataract surgery for the poor in Ampang Hospital Malaysia

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Abstract

Aim: To address the accessibility of funds from social support groups in order to enable the poor to undergo cataract operation and restore their eyesight. Awareness on the availability of fund among the poor is still low, thus highlighting the need for promotion of the facility.

Design : A case study using retrospective data from cataract surgery database.

Method: All data of patient who underwent cataract surgery with intraocular lens implanted from January 2012 to June 2014 in Ampang Hospital, Malaysia were retrieved.

Result: The records showed that 102 patients were funded for cataract surgery and had intraocular lens implanted. Almost all of these patients had low vision to near blindness prior to surgery but achieved excellent visual acuity post-operation. Restoring sight from cataract is a necessity for these patients since it will lead to a more productive life and increase the quality of life. Up to this date, various social support groups have contributed significantly to enable the poor to access advanced health care services. With the cooperation of Ampang Hospital and the Social Welfare Department of Malaysia, a simple method is needed to determine the eligibility of funding among poor patients who are required to undergo cataract surgery and intraocular lens implantation.

Conclusion: The financial contributions from the various social support groups and non-governmental organizations are noble and sustainable. Restoring eyesight contributes to better quality of life amongst the underprivileged population.

Keywords: cataract surgery, intraocular lens implantation, sight, social support, underprivileged.

Introduction:

Malaysia hopes to be a high-income nation by the year 2020 as envisaged in Vision 2020. Eradication of poverty continues to be one of the priority areas along with the thrust towards increasing the national productivity index of the nation. With the current population of Malaysia standing at 28.9 million of which 70% are between the age of 15 to 64 years and 5.1% over the age of 65 years,[1] the incidence of poverty continues to decrease significantly from 3.8% in 2009 to 1.7% in 2012.[2] The number of poor and poverty-stricken households has reduced from 228,400 in 2009 to 108,000 in 2012 during the same period; representing about 52.7% in reduction of poverty over a three-year period. Of the 13 states in Malaysia, the state of Selangor recorded the lowest incidence of poverty at 0.7 % while the Federal Territory of Kuala Lumpur showed 1.5 %.[3]

Poverty and blindness are closely related in which poverty may predisposes to blindness while blindness may subsequently lead to poverty by limiting employment opportunities and a reduction in household income. Cataract is one of the most common causes of blindness. It is an opacification of lens inside the eyes, obstructing light from passing and being focused on the retina at the back of the eye, leading to decreased vision. This condition is more commonly seen in advanced age population. Cataract is conventionally treated with surgery and is effective in restoring sight.[4] With proper consultation and management, about 80% of all visual impairment can be prevented or cured if brought through the right channel.

Due to the high costs incurred in cataract surgery and intraocular lens implantation, it is disturbing to see many patients unable to undergo cataract surgery, especially with intraocular lens implantation. Data from the World Health Organization indicated that 285 million people worldwide are estimated to be visually impaired and 90% of them are from the low-income group. Of those living with blindness or are visually impaired, 82% are aged 50 years and above.[5]

In Malaysia, the government has instituted that the poor and needy shall receive free basic medical treatment in government hospitals.[6] However, advanced medical treatments still incur substantial costs and this is defrayed partially by non-governmental organizations (NGOs) and social support groups.

As standard operating procedure for subsidized cataract operation in Malaysia, the Ophthalmology department initially screens patients on their

financial status, then they will be referred to the social welfare department of the hospital. The verification process done by interviewing the patients and their family as well as going through support documents for their financial plight. Once identified and verified, the social welfare department recommends to the social support group and NGOs that financial support should be given to these patients

Many corporate through their corporate social responsibility (CSR) program and social support groups contribute funds directly to the hospital for medical treatment of the poor and needy. The social welfare department of the hospital administers the support scheme for the patients. This procedure is firmly established and is practiced in Ampang Hospital. At present all patients eligible for subsidized lens received foldable intraocular lens. None of the patient left aphakic or corrected with glasses post operatively.

The present study describes the current scenario regarding financial assistance to the poor and needy who require cataract surgery with intraocular lens implant in Ampang Hospital, a government hospital in the Klang Valley in Malaysia. The findings from this study would hopefully lead to an improvement of the existing standard operating procedure and the social support scheme rendered by corporations, NGOs and social support groups**.**

Subjects and Methods:

This is a descriptive and retrospective study of patients who underwent cataract surgery with intraocular lens (IOL) implanted to the eye from January 2012 to June 2014 in Ampang Hospital in the Klang Valley, Malaysia. The data was obtained from the cataract surgery database in the Ophthalmology Department and Social Welfare Department of Ampang Hospital. The inclusion criteria for this study were patients who underwent cataract surgery regardless of all medical problems with intraocular lens and received financial assistance for the surgery. Patients who were eligible for the fund but did not undergo cataract surgery due to other reasons were excluded.

The visual acuity of the patients pre-operatively and 12 weeks post-operatively were recorded using Snellen chart and input into the Electronic Hospital information system (eHIS). Data entry and analysis were performed descriptively using the Statistical Package for the Social Science, SPSS version 15.0 (Chicago, Illinois, USA).

Results:

A total of 2,388 patients underwent cataract surgery from January 2012 till June 2014. Of this total, 144 patients were referred to the Social Welfare Department by the Ophthalmology Department for verification of their financial standings. From this, 102 patients successfully received financial assistance for intraocular lens implantation in their cataract surgery. Phacoemulsification was performed in almost all patients. Extracapsular cataract extraction was performed in only 2 eyes. Foldable hydrophobic acrylic intraocular lens were used in all patients.

Table 1 showed the socio-demographic data of patients who received financial assistance. The average age of patient eligible for subsidized cataract surgery was 64 years for both gender, and the patients were from various ethnicities; Chinese (46.1%), Malays (42.2%) and Indians (8.8%).

	No of people	%
Gender		
Male	57	55.9
emale	45	44.1
Ethinicity		
Malay	43	42.2
Chinese	47	46.1
Indian	9	8.8
Others	3	2.9

Table 1: Social demographic data of participants (%)

Snellen chart was used to record the visual acuity measurement in eHIS. The visual acuity in the affected eye was categorized according to WHO category; near-normal range from 6/3.8 to 6/19, low-vision range from 6/24 to 2/60 and near-blindness vision of 1/60 to perception of light. Data of visual acuity before surgery and 12 weeks post operatively for final best-corrected visual acuity was compiled.

Visual acuity in the operated eye among participants was poor pre-operatively (Figure 1). Majority of the patients (88.9%) presented with low vision to near blindness before surgery. Most of the patients (94.1%) regained normal vision post operatively and 5.9% remained with low vision due to co existing cornea and macula scar and diabetic maculopathy and only 1 eye was poor vision due to persistent cornea edema post operatively.

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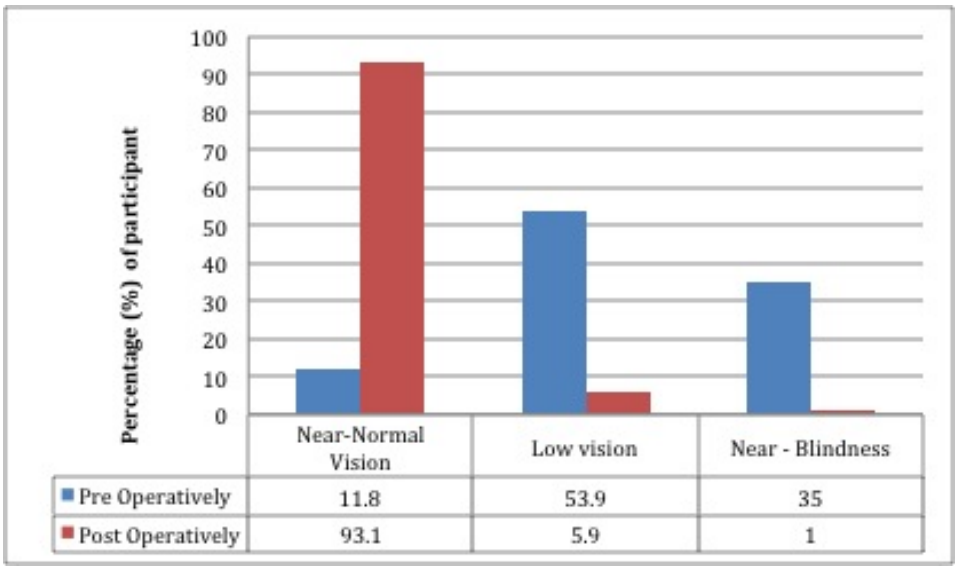

Figure 1: Visual acuity on the operated eye: pre operative and post operatively

Figure 2 listed the various organizations that provided financial assistance to patients for the cost of intraocular lens implantation in Ampang Hospital. 'Pusat Zakat Selangor' is an Islamic organization that contributes funding for the healthcare of the poor and needy Muslims. The Rotary Club and Church Organizations give donations to the poor and needy Malaysians. Finally, Ampang Hospital also provides financial assistance to the poor and needy that underwent cataract surgery and intraocular lens implantation. The hospital generated limited income by leasing shopping booths in the hospital complex to the public. A portion of this income goes into the Malaysian Medical Welfare Fund and subsequently used to assist the poor and needy for intraocular lens implantation.

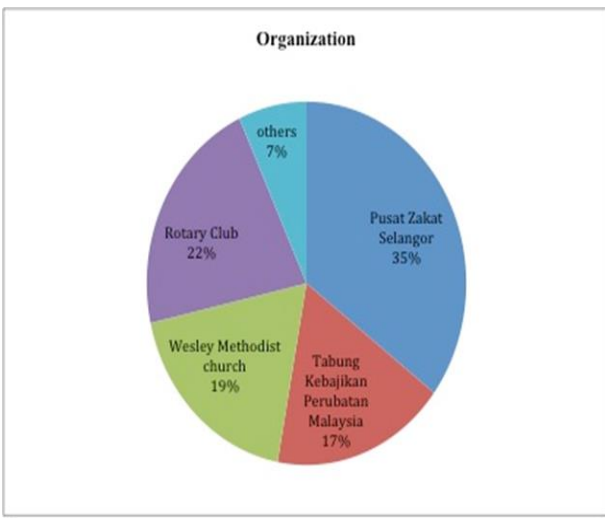

Figure 2: Sources of financial assistance (%)

Discussion

The Malaysian government is commended highly for its policy to offer affordable basic healthcare services to Malaysians generally, and free healthcare services to the poor and needy. Implementation of this policy has led to a remarkable reduction in poverty and an increase in productivity and household incomes.[1-3] This remarkable achievement is enhanced by contributions of social support groups and corporate social responsibility. The government allocated a substantial budget for developmental expenditure in health subsidy. In 2016 1.6 billion Ringgit Malaysia was allocated. The developmental expenditure for health was increased every year accordingly.[7] The allocated fund is not distributed equally among the 13 states but the budget is divided according to the states population.

In Malaysia, the average life expectancy at birth has increased from 69.2 years to 71.6 years for males, and 73.7 years to 76.4 years for females between 1990 and 2008, respectively.[3] With this increasing life expectancy, certain diseases and conditions especially eyesight conditions such as cataract may become a major problem. This is obvious where the average age of patients who underwent cataract surgery and intraocular implant was 64 years. These patients still have a more productive life ahead and as such, restoring their eyesight significantly increase their quality of life and contribute to the national productivity index. The Ministry of Health Malaysia has undertaken several programs to promote healthy living and prevention of diseases as part of its efforts to increase the quality of life.

In spite of the established procedure, there are still a significant number of patients who are visually impaired or decreased vision.[8-10] These patients cited the high cost of intraocular implantation as

the major constraint to seeking treatment for their eyesight restoration. They are not considered poor but could not afford to pay for the cost of cataract surgery and intraocular implantation.

Therefore, social support group should play an important role in identifying patients who are eligible for the funds. Together with various organizations, they can promote availability of funds for the underprivileged by promoting it through a variety of ways (e.g. websites, campaigns, posters, flyers and counseling sessions). However, the protocols for the funding involve various steps; starting from referral to Social Welfare Department who in turn determine the eligibility of the patients to financial assistance before undergoing surgery. This may involve a long waiting time and deters patients from undergoing the surgery.

The Social Welfare Department of Ampang Hospital ministers the funds for the patient in the hospital. Routinely, the medical officer in the Ophthalmology Clinic will refer patients who require financial assistance to the Social welfare department for approval. From this study, we observed that there were only a small number of patients who applied for financial assistance prior to cataract surgery. This raises an issue as to whether the poor is aware about the accessibility of these funds to improve their health care. A simple and reasonable method to assess the eligibility of patients should be developed and promoted so that patients are aware and that this facility is empowered to the ophthalmology medical team.

Although the social support groups had carried out their responsibilities to highlight and promote the accessibility of funds among the community not only for cataract surgery but also for the other aspect of their health care, more effort need to be done to increase awareness of this facility amongst the poor. An outreach program such as cataract campaigns is one of our methods to diagnose patient with cataract. In this camp, a medical team with social support groups will go to the respective rural areas and diagnose for cataract within the community in addition to promoting the existence of the funds. However, we need to improve the achievement of these outreach programs by increasing the frequency and ensuring sustainability. Another way to promote this accessibility is through the multimedia as majority of the public are using television, radio and internet in their daily activities.

Since 2013, the Standard Chartered Group has funded the intraocular lens implant for the underprivileged patients under the program known as 'Bank Kanta Intraokular Kebangsaan' (BKIOK). Involvement of Islamic organizations such as 'Pusat Zakat Selangor' in funding the cost of intraocular lens had strengthened the facility. The Church society, Rotary Club and Old Folks Home are also actively contributing to the program, in line with the Tenth Malaysia Plan (10MP) strategies.

Besides contribution from private companies CSR, Malaysia government has taken several steps to ensure sustainability for the subsidized cataract operation. In 2013 the Malaysia's Ministry of Health launched Klinik Katarak 1 Malaysia (KK1M), a new concept of using a mini bus that is well equipped with surgical instrument. The first KK1M was launched in Sarawak. The main aim of the KK1M is to serve rural patients in the state. The launching in Sarawak was followed by others similar mobile facilities in Peninsular Malaysia covering the states of Pahang, Terengganu, and Kelantan**.**

With all the help received from the social support groups and the foundations mentioned, poor people with visual impairment might now have a chance in improving their quality of life. The presence of cataract may cause a significant effect on their economic status. Kuper et al [11] showed that there is a significant relationship between visual impairment from cataract and poverty in three low-income countries: Kenya, Bangladesh and the Philippines. They found that patients with cataract were poorer than control patients in all three countries studied. Both economic and psychological status of patients may be affected by poor vision. Polack et al [12] found that the elderly in Kenya with visual impairment due to cataract were reported to be three times more likely to experience the problem of anxiety and depression than the elderly with normal vision. Thus, patients with cataract may have difficulties with their daily activities, in turn limiting their involvement in the community.

Older patients who had successful cataract surgery showed a marked improvement in their physical function and psychological status.[13,14]

They are able to resume their normal daily activities and maintain good quality of life. The improvement in the patient quality of life as well as health care system may alleviate poverty among population. In our study, most of the patients showed tremendous improvement in their postoperative vision.

Conclusion

Financial support from non-governmental and other organizations for health care services has enabled the poor to undergo cataract surgery and restore

eyesight. This effort should be made sustainable so as to enable the poor to achieve good quality of life. Better healthcare leads to a more productive workforce and is a core principle in making Malaysia a better place to live.

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