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PERKASA @ APS : SOLUSI KEPADA KERAPUHAN KELUARGA YANG MEMPUNYAI ANAK CEREBRAL PALSY

Wan Rohila Ganti binti Wan Abdul Ghapar
Fakulti Perniagaan, Ekonomi dan Pembangunan Sosial, Universiti Malaysia Terengganu
Rohila.ganti@umt.edu.my

Muhamad Fazil Ahmad
Fakulti Sains Sosial Gunaan, Universiti Sultan Zainal Abidin
mfazilahmad@unisza.edu.my

Norhashimah Yahya
Fakulti Kontemporari Islam, Universiti Sultan Zainal Abidin
nhashimahyahya@unisza.edu.my

Rahaya Mat Jamin
Fakulti Perniagaan, Ekonomi dan Pembangunan Sosial, Universiti Malaysia Terengganu
rahaya.jamin@umt.edu.my

ABSTRAK

Keluarga yang mempunyai anak kelainan upaya (OKU) Cerebral Palsy (CP) sering dihipit masalah kemiskinan. Ini adalah kerana ibu bapa tidak dapat keluar bekerja kerana keadaan anak CP yang terlantar, kejang otot, sawan dan memerlukan bantuan penjaga sepenuhnya. Mereka biasanya bergantung sepenuhnya dengan bantuan Jabatan Kebajikan Masyarakat dan derma orang ramai. Keadaan ini telah menyebabkan mereka merasa rendah diri, dan sering mengasingkan diri daripada masyarakat. Para ibu terutamanya, sering menyalahkan diri mereka ekoran daripada kecacatan yang dialami oleh anak mereka. Dari sudut kualiti hidup, ibu bapa sering berkonflik kerana tekanan kewangan, tekanan jiwa dan sering gagal mematuhi temujanji terapi kerana ketiadaan kenderaan dan wang. Mereka juga secara umumnya, lebih selesa mengharapkan bantuan masyarakat, dan sering menggunakan modal anak istimewa untuk menjana ekonomi keluarga. Model PERKASA@APS hadir sebagai solusi kepada masalah ini. Pemerksaan ekonomi bapa APS telah menjadikan mereka mandiri ekonomi melalui projek penanaman cili secara fertigasi. Ibu-ibu APS pula telah diberi latihan menjahit telekung, langsir dan baju kurung di Rumah Kebajikan APS melalui kerjasama Kolej Komuniti Kuala Terengganu. Ibu-ibu APS juga diajar pembungkusan semula kerepek Tortilla pedas, termasuk ilmu pemasaran atas talian. Mereka juga diajar menghasilkan cili boh berskala kecil, namun menguntungkan. Rasa malu dan rendah diri kerana mempunyai anak istimewa dan dihipit kemiskinan diubati melalui pemerksaan rohani oleh motivator dan psikologis yang memberikan dorongan dan semangat beserta sesi kaunseling kepada ibu-ibu yang depresi. Anak-anak CP pula di beri terapi saraf, terapi fizikal dan terapi seni secara berkala dan banyak membantu melegakan kesakitan dan ketegangan saraf yang mereka alami. Gabungan model pemerksaan ekonomi – rohani – fizikal telah terbukti berjaya mengubah kedudukan ekonomi keluarga APS, menghidupkan kembali semangat untuk berjuang demi anak CP mereka serta menambahbaik kualiti hidup anak CP melalui terapi intensif.

Kata kunci: Cerebral Palsy, golongan rentan, memperkasa ekonomi, sokongan sosial, anak istimewa

PENGENALAN

Keluarga yang mempunyai anak kelainan upaya (OKU) Cerebral Palsy (CP) sering dihipit masalah kemiskinan. Ini adalah kerana ibu bapa tidak dapat keluar bekerja kerana keadaan anak CP yang terlantar, kejang otot, sawan dan memerlukan bantuan penjaga sepenuhnya. Para bapa yang bekerja kerap diberhentikan kerja kerana mereka sering memohon cuti akibat komitmen temujanji hospital, temujanji terapi dan anak CP sering dimasukkan ke wad. Mereka biasanya bergantung sepenuhnya dengan bantuan Jabatan Kebajikan Masyarakat dan derma orang ramai. Keadaan ini telah menyebabkan mereka merasa rendah diri, dan sering mengasingkan diri daripada masyarakat. Para ibu terutamanya, sering menyalahkan diri mereka ekoran daripada kecacatan yang dialami oleh anak mereka. Dari sudut kualiti hidup, ibu bapa sering berkonflik kerana tekanan kewangan, tekanan jiwa dan sering gagal mematuhi temujanji terapi kerana ketiadaan kenderaan dan wang. Mereka juga secara umumnya, lebih selesa mengharapkan bantuan masyarakat, dan sering menggunakan modal anak istimewa untuk menjana ekonomi keluarga.

MODEL PERKASA@APS

Model PERKASA@APS hadir sebagai solusi kepada masalah ini. Model ini telah diadaptasi di Rumah Kebajikan Anak Permata Syurga Terengganu (APS) dan telah berjaya memperkasa dan mengubah keadaan ibu bapa kepada anak CP. Rumah Kebajikan APS merupakan sebuah badan bukan kerajaan (NGO) yang menaungi keluarga-keluarga yang mempunyai anak CP di Terengganu. Setakat ini, APS mempunyai 154 keahlian. Model ini merupakan gabungan pemerikasaan ekonomi-rohani- fizikal, telah mengubah keadaan ekonomi ibu bapa APS, membuang stigma rendah diri mempunyai anak istimewa dan membaiki kualiti hidup anak CP.

Pemerikasaan Ekonomi Bapa

Pemerikasaan ekonomi bapa APS telah menjadikan mereka mandiri ekonomi melalui projek penanaman cili secara fertigasi. Projek Rimbunan Segar dengan kerjasama Kerajaan Negeri telah menyewa tanah kebun untuk diusahakan oleh bapa APS, manakala benih, baja, racun dan khidmat nasihat datang dari sumbangan Jabatan Pertanian Bukit Payong. Seramai 10 bapa telah terlibat dalam Fasa 1 projek ini. Tuaeian pusingan pertama sebanyak 5 kali tuaian telah membawa hasil lumayan. Kejayaan Fasa 1 telah membangkitkan semangat mereka untuk mempelbagaikan hasil tanaman di Fasa 2 dengan menanam sawi, terung dan bendi. Sepuluh lagi bapa akan menyertai projek Rimbunan Segar pada Fasa 2 November 2021 nanti.

Pemerikasaan Ekonomi Ibu

Ibu-ibu APS pula telah diberi latihan menjahit telekung, langsir dan baju kurung di Rumah Kebajikan APS melalui kerjasama Kolej Komuniti Kuala Terengganu. Latihan selama 4 minggu telah memberi keyakinan kepada mereka untuk mengambil upah menjahit pakaian di samping dapat menjaga anak CP mereka. Ibu-ibu tidak lagi mempunyai alasan tiada pengasuh yang boleh menjaga anak CP mereka semasa mereka keluar bekerja. Jahitan yang kemas dan harga berpatutan telah perhatian pelanggan untuk menggunakan khidmat jahitan

ibu-ibu APS. Ibu-ibu APS juga diajar pembungkusan semula kerepek Tortilla pedas, termasuk ilmu pemasaran atas talian. Setiap pek kerepek Tortilla dijual dengan harga RM8, dengan ibu-ibu mendapat keuntungan bersih sebanyak RM2.50 daripada setiap pek yang terjual. Mereka juga diajar menghasilkan cili boh berskala kecil, namun menguntungkan. Ibu-ibu terpilih telah menjalani kursus jangka pendek penghasilan cili boh, penawetan dan pembungkusan agar tahan lama.

Perkasa Rohani

Rasa malu dan rendah diri kerana mempunyai anak istimewa dan dihimpit kemiskinan diubati melalui pemerikasaan rohani. Setiap pagi Jumaat, ibu-ibu APS berkumpul di Rumah Kebajikan APS untuk membaca Yaasin dan solat dhuha bersama-sama. Motivator dan psikologis seperti Ustazah Wan Nurhidayah Wan Pauzi dan Ustazah Norhashimah Yahya sering hadir memberikan dorongan dan semangat beserta sesi kaunseling kepada ibu-ibu yang depresi.

Perkasa Fizikal Anak CP

Pada setiap Isnin-Rabu, anak-anak CP diberikan sesi terapi saraf percuma oleh Kumpulan Terapi Darul Iman, terapi seni oleh Pusat Kesenian dan Warisan UniSZA dan terapi cara kerja oleh para sukarelawan. Anak-anak CP yang selama ini terperuk di rumah lantaran kemiskinan keluarga dan kekurangan sokongan sosial telah menikmati kehidupan yang lebih baik. Terapi saraf, terapi fizikal dan terapi seni telah membantu melegakan kesakitan dan ketegangan saraf yang mereka alami.

PENUTUP

Gabungan model pemerikasaan ekonomi – rohani – fizikal telah terbukti berjaya mengubah kedudukan ekonomi keluarga APS, menghidupkan kembali semangat untuk berjuang demi anak CP mereka serta menambahbaik kualiti hidup anak CP melalui terapi intensif. Model PERKASA@APS ini boleh diguna pakai kepada semua golongan rentan, aktivis – aktivis NGO, rumah – rumah kebajikan dan tidak terhad kepada keluarga Cerebral Palsy sahaja. Model ini sedang diadaptasi oleh Persatuan Buku Jalan Chow Kit. Model PERKASA@APS ini juga telah berjaya melonjakkan usaha Malaysia mencapai matlamat 1 (sifar kemiskinan) dan matlamat 10 (kesaksamaan sosial) dalam Matlamat Pembangunan Mampan (Sustainable Development Goals).

RUJUKAN

- Alaee, N., Shahboulaghi, F. M., Khankeh, H., & Kermanshahi, S. M. K. (2015). Psychosocial challenges for parents of children with cerebral palsy: A qualitative study. *Journal of Child and Family Studies*, 24(7), 2147-2154.
- Khayatzaheh, M. M., Rostami, H. R., Amirjalali, S., & Karimloo, M. (2013). Investigation of quality of life in mothers of children with cerebral palsy in Iran: association with socio-economic status, marital satisfaction and fatigue. *Disability and Rehabilitation*,

35(10), 803-808.

Park, E. Y., & Nam, S. J. (2019). Time burden of caring and depression among parents of individuals with cerebral palsy. *Disability and rehabilitation*, 41(13), 1508-1513.

Terra VC, Cysneiros RM, Schwartzman JS, et al. Mothers of children with cerebral palsy with or without epilepsy: a quality of life perspective. *Disabil. Rehabil.* 2011;33:384–388.



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