



Parental behavior enhancement toward childhood home accidental injury prevention การส่งเสริมพฤติกรรมบิดามารดาในการป้องกันการบาดเจ็บจากอุบัติเหตุแก่เด็ก

อมรรักษ์* งามสวย* ปร.ด.* Amornrat Ngamsuoy* Ph.D.*

บทคัดย่อ

การบาดเจ็บจากอุบัติเหตุในบ้านและรอบๆบ้านเป็นสาเหตุสำคัญของการเสียชีวิตในเด็กอายุต่ำกว่า 5 ขวบ โดยเฉพาะอย่างยิ่งมักเกิดขึ้นขณะที่เด็กอยู่ภายใต้การดูแลของผู้ปกครอง การเปลี่ยนแปลงพฤติกรรมของบิดามารดาเป็นสิ่งจำเป็นเพื่อลดความเสี่ยงต่อการบาดเจ็บในเด็กเล็กจากอุบัติเหตุที่บ้าน ปัจจัยสำคัญที่มีอิทธิพลต่อพฤติกรรมการป้องกันการบาดเจ็บจากอุบัติเหตุที่บ้านของเด็กเล็กในครอบครัวไทย ได้แก่ ความรู้ความตระหนักความวิตกกังวลและเจตนาของบิดามารดา บทบาทของผู้ดูแลสุขภาพเด็กรวมถึงพยาบาลในการส่งเสริมให้บิดามารดาที่มีความเข้าใจมากขึ้นเกี่ยวกับการเกี่ยวกับการป้องกันการบาดเจ็บจากอุบัติเหตุในบ้านในเด็กเล็กโดยใช้แนวคิดการเสริมสร้างพลังอำนาจของกิบสันมาประยุกต์ใช้ในการพัฒนาพฤติกรรมของผู้ปกครองให้มีการป้องกันการบาดเจ็บดังกล่าว นับเป็นประโยชน์อย่างยิ่งสำหรับการสนับสนุนองค์ความรู้ด้านการพยาบาลเด็กและผู้ให้บริการด้านการดูแลสุขภาพในการกำหนดนโยบายด้านสุขภาพของเด็กและพัฒนาแผนการสร้างเสริมสุขภาพเด็ก

คำสำคัญ: การส่งเสริมบิดามารดา การป้องกันการบาดเจ็บจากอุบัติเหตุแก่เด็ก

Abstract

Home accidental injury has been one of the leading causes of death in children under the age of five, particularly it often happened under guardians' supervision. Parental behaviour change is needed to reduce the risk of home injury in young children. The key factors influencing parental behaviour on child home accidental injury prevention include cognition, awareness, anxiety, and intention of parents. The role of child healthcare provider and nurse is to enhance greater understanding of parental behaviour development in regard to childhood home accidental injury prevention through Gibson's empowerment concept. This can be a valuable benefit for nursing implications and healthcare providers to shape child health policy and develop child health promotion plan.

Key words: Parental behavior enhancement, Childhood home accidental injury prevention

* รองศาสตราจารย์ คณะพยาบาลศาสตร์ มหาวิทยาลัยเชียงใหม่

* Associate Professor, Faculty of Nursing, Chiang Mai University, amornrat.ngamsuoy@cmu.ac.th

Introduction

The growing rate of unintentional injury in children is one important part of the picture of worldwide child health conditions which leads to higher levels of mortality and morbidity among children, especially in the young age group (WHO/UNICEF, 2008). Childhood accidents are further classified into five key means of occurrence: poisoning, burns and scalds, drowning, falls and transport-related (WHO, 2010). Home injury also has the highest frequency of incidence among young children aged under six years old in both developed and developing countries, involving particularly falls, burns and poisonings (Morrongiello & McArthur, 2010). However, the incidence of this global child health problem mostly occurs in low and middle income countries (Peden et al., 2008). Research suggests that the most common site of unintentional injury among young children is in the home (Nansel et al., 2008; Pearson et al., 2011).

According to a profile of child injury in Thailand (World Health Organization, 2010), almost 50% of all child deaths in the 1-4 aged group were from drowning in the home or within 100 meters of the home and almost three quarters of drowning in young children occurred within 50 meters of the home. The leading causes of childhood home injury morbidity in Thailand have been different from global. Drowning has been and still has the highest incidences; considerably, animal bites have become more serious than poisoning, falls and burns. Fortunately, the World Health Organization (2010) states that unintentional childhood injury is the first major type of preventable injury which

primarily occurs in the home, school, workplace, and on the road. The major types of unintentional home injuries causing death in children aged 1-4 years are drowning, falls, burns, poisoning and animal injury. The early childhood accidental injuries often happen mainly in and around the home (Child Safety Promotion and Injury Prevention Research Centre, 2014).

Unintentional injury in the home is a major cause of death and illness among young children in both rich and poor nations (Peden et al., 2008). According to current major studies, home injury is the leading cause of death and hospitalization in children under the age of five in both developed nations such as the United Kingdom (Kendrick et al., 2013) and the United States (Phelan et al., 2011) as well as in developing countries like Thailand (WHO, 210; Child Safety Promotion and Injury Prevention Research Centre, 2014). This critical issue affects not only the young children as individuals but also their families and communities. The suffering through home injury of these young children on the individual dimension is huge, with various types of home injury effects being hurt, disability, painful treatments in hospital and possible school hours lost to hospitalization or illness (Irving, 2011). In addition, fatal injury in the home affects family, community and society, with higher expenses for medical treatment, especially for children and young people who encountered permanent disability from severe injuries (Peden et al., 2008; Centers for Disease Control and Prevention, 2012).

Incidence of child home accidental injury

A significant profile of child injuries in



Thailand (WHO, 201) indicates that approximately 1.5% of Thai children with accidental injury required hospitalization and preschool age with unintentional injury lost three days of school learning approximately. This exploration also claims that over 1,600 children had a permanent disability and around 16 Thai children died from injury per day. Furthermore, their investigation points out that these home injury conditions are the main barriers to health promotion in terms of growth and development among young children.

Young children aged 4 and under need to completely depend on their parents and caregivers for unintentional injury prevention because they have not yet developed the ability to fully appraise the risks of environmental hazards (Van & Stein, 2010). It is also noticeable that the accidental injuries in young children become higher incidences when they stay in and around the residences with their caregivers and family members (Child Safety Promotion and Injury Prevention Research Centre, 2014). Munro et al. (2006) point out that there are three major factors of home accidental injury in young children, namely, environment, caregivers' supervision and child characteristics. It is probably noteworthy that most injuries happen under the supervision of caregiver and family members. A study on injuries and submersion incidence in children under 5 years old living in disadvantaged, developing world, indicated most injuries happened when children were supervised by their parents in the home (Jonkheijm et al., 2013).

Thai children living in extended families were evidenced by 95.3% from 2002 to 2009.

In addition, apart from child care centers, 66.20 per cent of children aged 0-5 years received care at home from their parents; whereas 23.60 per cent were under supervision at home by other caregivers such as grandparents, relatives and housekeepers (National Statistical Office, 2014). Importantly, in a further study on Thai children by the Child Safety Promotion and Injury Prevention Research Centre (2014), children aged 1-4 living with both parents and other members of the extended family such as older siblings and grandparents, tended to be at increased risk of accidental injury in and around the home.

Approach of parental behaviour improvement for child home accidental injury prevention

Parental behaviour change needs to be addressed by effective strategy in order to enable parents to make decisions and enhance problem solving skills. The empowerment process (Gibson, 1993), is strongly utilised to influence parents' perceptions and behaviour change for childhood home accident prevention. Both intrapersonal and interpersonal process of empowerment are strongly intertwined (Gibson, 1995). Healthcare professionals and nurses collaboratively worked with parents underpinning achievement of empowerment approach. The precondition of empowerment process was conducted to discuss both internal and external factors influencing the success of parents' participation in particular to components of empowerment process.

Discovering reality

The information of veritable situation

toward child home accidental injury as external resource supported this step of psychological empowerment process by forming responsible function of active beliefs of parents (Stringer, 2014). Parents realize that childhood home injury is a drastic public health problem. After learning the current facts on childhood home accidental incidences both in Thailand and across the world, parents will exhibit emotional responses. Their feelings can be revealed in terms of awareness and anxiety because they have never been concerned with harmful situation of child accidental drowning. Their feelings can be formed through social cognitive domain after perceiving authentic incident. Raising anxiety through health promotion activities and research can be questioned ethically, viewed as performing harm to participants (Long, 2007).

Cognitive responses also occur among parents. Parental behaviour towards childhood home injury prevention is an automatic reaction of their awareness shaping through the social cognitive process (Payne, 2012). It can be argued that although they felt anxious this was only the first stage in a process which will reduce their anxiety and lead to improved child home safety; it is therefore justified. Thus, when every parent is stimulated by authentic critical information related to child accidental injury via the multi-media presentations, they may describe feelings of fear and being upset during short period of watching. This can imply that their cognitive and awareness domains were activated, underlying their acceptance of the significance and reality. Respectively, parents will present their behavioral responses. They can assume

responsibilities for their child's health and safety they therefore strongly intend to prevent home accidental injury. All parents critically diagnosed their own child safety conditions in terms of insufficiency of their home safety as well as anxious about childhood home injury. However, they were driven by the sense of hope and optimism that their child health situations would be safe, hence, they consistently were determined to improve their behaviours regarding child accident prevention at home.

Critical reflection

The escalation of anxious and awareness can force parents to reflect themselves and critically examine their situation. The process of critical reflection is the second step of the empowerment process (Gibson, 1993). Parents will develop confidence in their knowledge and competences on their current childhood home injury prevention. They become to realize the practices of child home injury prevention. Throughout the process, each parental couple also evaluate their difficulties lay and what they can deal with them, in terms of behavioural control, such as inadequacy of home safety devices and home boundary limitation. However, parents will attempt to balance relationship between their power and control, and make decisions to select the suitable ways of problem solving consequently. For instance, poor parents attempt to adjust available materials in their home to be home safety devices. In addition, they also discuss with their relative neighbours to collect money together for a gate installation. This is conducive to self-development in every parental couple with regard to problem



assessment, situation analysis and understanding, leading to the positive modification of parental behaviour for home injury prevention in children. Hence, parents will strongly determine to carry out the agreed plan of parental behaviour programme for childhood home injury prevention based on their own family context (Ngamsuoy, 2014).

Taking charge

Once the parents are aware of their efficacy (Bandura, 1997) and become more confident in their knowledge and skills of childhood home injury prevention, they will take charge of the situation. They will extremely intend to improve their behaviour in preventing childhood home accident. The parents can exchange their knowledge and experiences on child supervision with other members in the participatory learning group, reinforced by the recommendation of the facilitator in the process of Think (Stringer, 2014). They then acquire various option to improve their behaviour on childhood home accident prevention.

In this stage, parents also discuss together with individual parental couples on how to provide the most appropriate procedures in preventing home injury for their young children, based on their own family contexts. Parental couple will work together in the group to produce the behaviour plan for child safety and consequently implement this plan in their home. The main outcome of group work can be generated in a form of a guideline manual, taking charge entails (a) assessment risk points in and around the home, (b) providing safeguarding devices, (c) close child supervision, (d) child

education regarding home safety rule, and (e) recommendation towards home safety rules to family members (Ngamsuoy, 2014).

Holding on

The final stage of the empowerment process (Gibson, 1993) is «holding on». As a result of parents' awareness, competences, and capabilities, they can maintain their own sense of power even dealing with some barriers. Although parents experienced feelings of fear and anxiety, their main competences kept up the phase of holding on. They developed the sense of personal control in terms of strong intention and self-regulation. Hence, they were able to control their own behaviour through self-efficacy belief and self-regulation developed through gathering knowledge and skills (Reeve, 2009). According to the ongoing cycle of critical reflection, parents become understanding the critical situation that exists within their own family. They will regularly perform childhood home injury prevention behaviour as provided in the parental behaviour plan they developed, and also develop this action plan in the forms of a guideline manual booklet finally underlining high realisation of their own competences and capacities. They will consequently continue to practice in regard to home injury prevention for young children through assessing their situation and develop alternative strategies.

Factors influencing empowering parental behaviour toward child home accidental injury prevention

Both psychological and group empowerment can be conducted to effectively

improve parental behaviour in regard to child home injury prevention (Ngamsuoy, 2014). In order to successfully empower psychological domain, parents' intrapersonal factors are included, with regard to the parents' cognition, awareness, anxiety, and intention. Social support will be an important interpersonal factor influencing the empowerment process (Gibson, 1993).

Cognition

Parents will develop their behaviour toward child home injury prevention practically and sustainably, if they have cognitive determinant. Cognition of parents can be formed after perceiving the recent information toward home injury in young children and some prevention guidelines and a sense of parenting will be salient consequently (Rachman, 2013).

Anxiety

Anxiety is the stress anticipation of an intimidation from an ambiguous situation leading to various difficulties of concentration and decision making (Rachman, 2013). Formation of parental anxiety is an essential component for cognitive analysis based on the concept of cognitive process, similar to the other associated elements, including remembrance, rationality, precaution, minding and determination (Rachman, 2013). Although anxiety has a negative impact on parents, similar to fear, and the real incidences can be criticised for inducing anxiety, it can be beneficial for parents as being conducive to inducing home injury precautions for their young children.

Awareness

The parents become aware of adverse impacts of child home injury as well as benefits of child home injury prevention after receiving situational information. Each parent needs to accept in their authority, leading to bravery in facing to critical problems of child home injury prevention (Gibson, 1993). All parental couples have awareness of developing their behaviour for home injury prevention in young children. They also rely on their capability to reduce injury risks and closely supervise their children for safety at home.

Intention

when parents get knowledge, awareness, and anxiety, they will strongly intend to improve their behaviour with regard to childhood home injury prevention. Although other determinants of health-related behaviour with regard to subjective norm and perceived behaviour control can be challenging, however all parents are able to solve problems, hence difficulties of both determinants may less affect parental behaviour modification (Ajzen, 1991; Conner & Sparks, 2005).

Social support

Another important consideration is the interconnectedness of the parents and environment. Parental couple can utilise their great opportunities to share and learn mutually in a group which is conducive to creating and implementing the regulations or practical guideline for preventive practice in their home. The continuous and dynamic nature of the empowerment process (Gibson, 1993) is a



significant determinant influencing parental behavior improvement on child home injury prevention. All parents can also be psychologically empowered through the group process and participatory learning (Stringer, 2014). Interpersonal participation is an empowering strategy in enabling self-reliance among parents to develop their capabilities of childhood home injury prevention based on advocating from social support of group participants and healthcare professionals (Ngamsuoy, 2014).

Conclusion

Child safety is a key indicator of the strength of villages and communities in Thailand. Childhood home injury prevention is also an essential behaviour for parents and child

caregivers. This will help healthcare professionals and policy makers in Thailand to better understand influences on child home safety parental behaviour; particularly to help them see the potential benefits of a collaborative workshop approach in supporting parents. This can then inform their practice toward improving child home safety. In healthcare and nursing practice, empowerment approach can be employed to support child health education for parents of young children and their extended families. One important outcome of the process is that healthcare providers need to establish a trusted working relationship with the parents. This is very important for nursing practice in Thailand to allow nurses access to families and to ensure the interventions provided by the healthcare professionals are accepted.

References

- Ajzen, I. (1991). The theory of planned behaviour. *Organizational behaviour and human decision process*, 50, 179-211.
- Bandura, A. (1997). Self-efficacy: The exercise of control. New York: Freeman.
- Centers for Disease Control and Prevention. (2012). Vital Signs: Unintentional injury deaths among persons aged 0-19 years—United States, 2000-2009. *Morbidity and Mortality Weekly Report*, 61(15), 270-276.
- Child Safety Promotion and Injury Prevention Research Centre. (2014). Safe products for children. Retrieved 5 November 2016, from Child Safety Promotion and Injury Prevention Research Centre <http://www.csip.org/>
- Conner, M. & Sparks, P. (2005). Theory of planned behaviour and health behaviour In M. N. Conner, P. (Ed.), Predicting health behaviour (pp. 170-222). London: Bell & Bain.
- Gibson, C.H. (1993). Empowerment theory and practice with adolescents of colour in the child welfare system. *Families in Society*, 74(7), 387-396.
- Irving, L. (2011). Preventing unintentional injuries in children and young people under 15. *Community Practitioner* 84(3), 36-38.
- Jonkheijm, A., Zuidgeest, J.J., Dijk, M., & Van, AS. AB. (2013). Childhood unintentional injuries: supervision and first aid provided. *African Journal of Paediatric Surgery*, 10(4), 339-344.

- Kendrick, D., Young, B., Mason-Jones, A.J., Ilyas, N., Achana, F.A., Cooper, N.J., Hubbard, S.J., Sutton, A.J., Smith, S., Wynn, P., Mulvaney, C., Watson, M.C., & Coupland, C. (2013). Home safety education and provision of safety equipment for injury prevention (review). *Evidence Based Child Health*, 8(3), 761-939.
- Long, T. (2007). What are the ethical issues in research? In C. Webb, Johnson, M., & Long, T (Ed.), *Research ethics in the real world: Issues and solutions for health and social care* (pp. 47-62). China: ELSEVIER.
- Morrongiello, B.A. & McArthur, B.A. (2010). Parent supervision to prevent injuries. Retrieved 28 April 2017, from Centre of Excellent for Early Childhood Development <http://www.child-encyclopedia.com/sites/default/files/textes-experts/en/654/parent-supervision-to-prevent-injuries.pdf>
- Munro, S.A., Niekerk, A.V. & Seedat, M. (2006). Childhood unintentional injuries: The perceived impact of the environment, lack of supervision and child characteristics. *Child: Care, Health & Development*, 32(3), 269-279.
- Nansel, T.R., Weaver, N.L., Jacobsen, H.A., Glasheen, C. & Kreuter, M.W. (2008). Preventing unintentional pediatric injuries: A tailored intervention for parents and providers. *Health Education Research*, 23(4), 656-669.
- National Statistical Office, Thailand. (2014). Family statistics. Retrieved 28 April 2017, from service.nso.go.th/nso/nsopublish/citizen/news/news_family.jsp
- Ngamsuoy, A. (2014). Developing a parental behaviour programme for child home injury prevention in Thailand: Parents' experiences and perceptions. Doctoral Dissertation. Newcastle upon Tyne: Northumbria University Library.
- Payne, B.K. (2012). Control, awareness, and other things we might learn to live without In S. T. M. Fiske, C.N (Ed.), *The sage handbook of social cognition* (pp. 12-30). London: SAGE.
- Pearson, M., Garside, R., Moxham, T. & Anderson, R. (2011). Preventing unintentional injuries to children in the home: A systematic review of the effectiveness of programmes supplying and/or installing home safety equipment. *Health Promotion International*, 26(3), 376-392.
- Peden, M., Oyegbite, K., Ozanne-Smith, J., Hyder, A.A., Branche, C., Rahman, A.F., & et al. (2008). World report on child injury prevention: Geneva: WHO & UNICEF.
- Phelan, K.J., Khoury, J., Xu, Y., Liddy, S., Hornung, R., & Lanphear, B.P. (2011). A randomized controlled trial of home injury hazard reduction. *Formerly Archives of Paediatric & Adolescent Medicine*, 165(4), 339-345.
- Rachman, S. (2013). *Anxiety* (3rd ed.). New York: Psychology Press.
- Reeve, J. (2009). Understanding motivation and emotion (5th ed.). New Jersey: John Wiley & Son, Inc.
- Stringer, E.T. (2014). Action research (4th ed.). London: Sage.
- Unicef, World Health Organization, World bank group, & United nations. (2017). Levels & trends in child mortality Retrieved 28 September 2018, from https://www.unicef.org/publications/files/Child_Mortality_Report_2017.pdf
- Van, AS.AB. & Stein, D.J. (2010). Child safety: A neglected priority. *World Journal of Pediatrics* 6 (4), 293-295.
- World Health Organization. (2010). Profile of child injuries: selected member states in the Asia-Pacific region. New Delhi: Regional office for South-East Asia.