Association of Diabetes Nurses

香港糖尿科護士協會通訊
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編者的話

不經不覺『香港糖尿科護士協會』已經成立了一年，我們亦已於6月27日舉行了第一屆週年大會，當日眾多會員及嘉賓共渡過一個難忘而豐盛的下午，各會員均表示獲益良多。歡迎大家成為我們的一份子，詳情請參閱http://www.ahkdn.com；大家亦可在Chat corner知道本會過往活動的情況和精彩片段。而今期通訊內容就以最近的熱門話題『護士顧問』(Nurse Consultant)為主題，特別邀請兩位新上任的糖尿科護士顧問撰寫專題文章，大家可以從多角度去了解這個專業的發展。此外，『個案研究』進一步印證了糖尿專科護士在糖尿病管理的角式和功能，同時展現出專科護士的專業性和獨立性。而今期的『糖尿病中心天地』則會介紹律敦治及鄧肇堅醫院的糖尿病中心；內容豐富，不容錯過。

Nurse Consultant – History, Development and Prospects

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The posts of Nurse Consultant (NC) were created by the Hong Kong Hospital Authority, for the first time, in early 2009 for certain chronic disease disciplines. Though these posts are new to Hong Kong, the roles, responsibilities and functions of nurse consultants are well entrenched in other major health care jurisdictions, such as the United Kingdom, Australia, United States and Canada. In United Kingdom and Australia, the same professional term Nurse Consultant (NC) is used while in the United States and Canada, the term Clinical Nurse Specialist (CNS) is adopted. In order to introduce the background of NC to our readers, I have attempted in this article to provide you with an overview of the history, development and prospects of NC in the United Kingdom and Australia.

United Kingdom

The posts of NC were created by the UK Government in 1999 under the National Health Services (NHS). In establishing this new post, the NHS cited that the motivation was for the purpose of modernizing the delivery of health care services in general and the provision of an advanced clinical nursing career opportunity with the appropriate financial remunerations to encourage the recruitment and retention of quality specialist nurses. The new post also created a clinical route in addition to the traditional managerial route for staff development of professional nurses. It was recognized by the NHS that job satisfaction could perhaps be better enhanced for many professional nurses if such a specialist and clinical route was made available as a career option. Central to the functions of NC was the role to provide clinical leadership and staff development.

The NHS stated that the roles and functions of the NC should be divided equally between achieving better outcomes for patients and strengthening leadership and staff development for other professional nurses. The NCs were given four essential domains to their roles. The four domains were expert practice; profession leadership and consultancy; education, training and development; research and evaluation.

To provide effective and expert practice, Manley (2001) described NC should have qualities and skills as follows:

- Transformational leadership: the ability to develop leadership potential of other nurses within a shared and common vision.
- Emancipating leadership: helping nurses to overcome barrier in themselves, their work and workplace.
- Practicing expertly as a practitioner, researcher, consultant as well as new and best practice developer. NCs need to act as a role model and facilitator of change in new practice and service development.

On elaborating what constitutes transformational leadership qualities, the research findings of Mclntosh and Tolson (2008) suggested that it should include developing a vision for the service, acting as mediator, champion and exerting control over complex change initiatives. Techniques of leadership included taking a "softly" approach, pacing change initiatives and arguing assertively with those in senior positions. The elements of intellectual effort and interpersonal skills in achieving desirable outcomes were also important.

Australia

In 1986 the New South Wales (NSW) nurse's award structure created a new level of nursing – Clinical Nurse Consultant (CNC). The definition of a CNC was "…a register nurse (RN) appointed as such to a position approved by the department and who has had at least five years post basic registration experience and who has in addition approved post basic nursing qualifications

relevant to the filed in which they are appointed …the role involved with consulting, researching, assessing and revising the delivery of clinical nurse services." (Elliott et al 1992)
In 1992, Wentworth Area Health Service, one of the New South Wales Health Service, conducted a survey to review the roles and functions of the CNCs in its area. It was found that education, liaison/resources, research and clinical were the four common components of CNCs. It is important to note that this review highlighted the diversity of the CNCs role. The review also included a statement of role descriptors, development of a professional peer support group and ways of better utilization of CNCs.
In 2000, NSW Department of Health had set up 3 award grades of CNC that would relate directly to the remunerations of CNC. The each grade of CNC was defined as follows:

Grade 1 CNC: RNs with at least 5 years full time equivalent post basic registration experience and approved post basic nursing qualifications relevant to their fields they area appointed.

Grade 2 CNC: RNs with at least 5 years full time equivalent post basic registration experience and at least 3 years full time equivalent experience in the specialty field. They must have approved post registration nursing qualifications relevant to their fields they are appointed. They also required a higher qualification in the specialist-nursing field where such a qualification is considered essential for the performance of the individual position.

Grade 3 CNC: RNs with at least 7 years full time equivalent post basic registration experience and at least 5 years full time equivalent experience in the specialty field. They must have approved post registration nursing qualifications relevant to their fields they are appointed. They also required a higher qualification in the specialist-nursing field where such a qualification is considered essential for the performance of the individual position.

In order to differentiate between the three award grades of CNC, five domains of roles of CNC were developed:
1. Clinical service and consultancy: provides expert clinical advice, develops and facilitates implementation and evaluates care management plans for patients with complex health needs
2. Clinical leadership: provides leadership that facilitates the ongoing development of clinical practice
3. Research: initiatives and utilizes findings of research
4. Education: develops and delivers specialty related educational programs
5. Clinical services planning and management: participates in formal processes for the strategic and operational planning for the clinical service.

After reviewing briefly the development and background of NC in the United Kingdom and Australia, it is clear that the roles and functions of the NCs are indeed a needed and challenging one. It is also clear that such roles and functions will be an evolving one as the context of health care delivery system changes over time. In Hong Kong, it is important for us to learn form the experiences and challenges of other major health care jurisdictions but it is also important that we keep an open mind and develop the types of practices that are more suited to our needs.

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Role and Function of Nurse Consultant (Diabetes Care) in Hospital Authority

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As we are experiencing a rapid aging population, the prevalence of diabetes mellitus is expected to increase in Hong Kong[1]. It is estimated that by 2016, people aged 65 and above will increase by 30% to 1.13 million. For those aged 80 and above, the rise is even more dramatic. It is estimated to experience a 43% increase, resulting a change from 217,000 to 3,100,000. Apart from the increase in numbers, the complexities of co-morbidities among the elderly and the growing public expectations of quality care will generate a huge demand and burden to the existing health care services.
Diabetes is associated with significant morbidities and mortalities. Early interventions, through modification of lifestyle and pharmacological treatment when indicated, have been shown to prevent or delay the onset of associated long-term complications. Overall management strategy of chronic diseases should involve lifestyle changes on a much wider scale for all

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normal healthy individuals to prevent disease development. The strategy would also involve the implementation of a structured care protocol for already diagnosed diabetic patients and alignment of existing resources and strengths within and outside HA to channel patients with different degree of disease complexity to appropriate levels of care.

Need for role expansion in diabetes care

Diabetes Nurses Specialist has a long history of advanced nursing practice in Hong Kong. Currently, nurse specialist is mainly designed to cater for nurses who function as resource personnel and sources of expert nursing knowledge within their unit and specialty. Despite the great effort, most existing Diabetes Nurse Specialist is currently under the Department of Medicine, and therefore, working boundaries is still mainly within the Department. Moreover, the current serving population remains far beyond the need requirement. Chronic diseases, as exemplified by diabetes, usually have variable presentations, prolonged and evolving disease courses, as well as multiple organ involvement at late stages. In real practices, patients having unstable and/or complex disease conditions are often mixed with those having stable and/or simple disease conditions at the Diabetes Specialist Clinic. Likewise, the diabetic patient mix managed by the family physicians at General Out-patient Clinics is also heterogeneous. Besides, simple and stable diabetic patients may become unstable with onset of associated disease complications as time passes. Under the existing health care delivery structure, changes in patient conditions requiring inputs from different expertise would necessitate cross specialty referrals, generating much inevitable administrative workload. The compartmentalization among different levels of health care service indicates for nurses to take up new roles to work across boundaries and setting up new services to meet patient's needs.

Furthermore, in the past, the career pathway did not facilitate keeping nursing expertise and leadership at the clinical interface. Career development for senior nurses was either through academic or management field. However, facing the increasing complexity of patient care and rapid changes and advancement in health care therapeutics, the need for expert nurses who are clinically- based is essential. The recent introduction of a clear clinical career pathway for nurse specialist can be viewed as a kind of recognition of their expert clinical nursing capability and achievement. It may also assist in the expansion of nursing roles to enable frontline clinical leaders to maximize their contribution in delivering safe and effective health care, as well as developing a varied mix of skills, to work across hospital and community health care settings.

The new post: Nurse Consultant in Diabetes Care

The Nurse Consultant is intended to cater for specialist nurses who fulfill a cross-hospital or cross-unit role and who are principally involved in clinical consultancy, review, assessment and research. It is newly established by the Hospital Authority to provide clinical leadership and advancement in nursing specialty / subspecialty in 2009. He/ she will report to the COS/ clinical leader in the planning, development and implementation of service of the related specialty within the local clinical units. He / she should be accountable to the General Manager (Nursing) / Cluster General Manager (Nursing) in the planning and development of clinical and professional development of the related specialty within cluster.

[2] Five domains on the roles and responsibilities of nurse consultant have been identified. They include providing leadership for complex service and leading the development and management of clinical processes; provide expert care and consultancy service; contribute significantly to implementation of clinical nursing education within the specialty; initiate, conduct and disseminate findings of nursing research; initiate, develop, implement and evaluste strategic changes for the clinical specialty/service for the hospital. cluster, and/or Hospital Authority [2]

Advanced practice in Diabetes Care: The way forward

The way forward is to identify and implement strategies to enable capacity building and role expansion of Nurse Consultant in diabetes care, modernization of infrastructure towards addressing the current inflexibilities and barriers in nursing that get in the way of integrated care for patients. He / she should be prepared for working in different patterns of care, across the health and social care system and working outside hospitals so as to achieve more timely intervention of diabetes in different levels of health care sectors and divert low complexity services to appropriate care partners. For example, to enhance the establishment of a diabetes educational service in the primary care sector, a **Diabetes Link Nurse System** in General Out-patient Clinics of the Hong Kong West Cluster is developing through the close collaboration and offering of training and resource support to GOPC nurses, to facilitate the provision of quality diabetes education to lpatients in the community. It also Iacts as a platform for the nurse consultant to provide clinical consultancy services and expert advice on patient care across different levels of care within the specialty.

In order to respond to the expanding demand from stakeholders with different priorities, there is a need for role migration towards initiation and evaluation of strategic changes in managing complex projects relating to significant practice change so as to enhance the effectiveness of service provision. For example, owing to the long waiting time for newly referred diabetic patients to be seen at the Specialist Out-patient Clinics, a trial program of **Pre-Clinic Assessment** mechanism has been developed by the Nurse Consultant at the Queen Mary Hospital, to identify those with conditions requiring earlier attention. All newly referred patients to the Diabetes Specialist Clinic shall then be triaged under an agreed admission policy (current referral guidelines and triage system) subjected to regular review. These referrals will be evaluated based on some essential information required to be provided by the referring doctors. After completion of a Health Surveillance Program and Diabetes Educational Program, a new case appointment with waiting time appropriate to the urgency of the underlying medical conditions of patients being referred shall be given.

Conclusion

We are still in the process of exploring the scope of practice and role expansion that we, diabetes nurses, should perform in Hong Kong. There is overwhelming enthusiasm, both for improving patient care and for supporting our career progression. The purpose of establishing the new roles of Diabetes Nurse Consultant may be viewed as a reward in recognizing the complexity

of contemporary expert nursing practice of diabetes care in Hong Kong[3]. The key for success and further development may depend heavily on the way of clarification of a comprehensive and coherent clinical career path for our future development. Open discussion, ongoing evaluation and infrastructure changes may align and facilitate opportunities for clinical career progression and resulting in capacity building for senior clinical careers.

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糖尿科中心天地：律敦治及鄧肇堅醫院

糖尿科專科護師區家燕

灣仔是一個新舊並存的獨特社區，是中西文化的交匯點。

律敦治醫院座落於灣仔市中心，共有病床600多張，與毗鄰的鄧肇堅醫院於1998年4月1日正式合併為同一管理架構的社區急症醫院。

律敦治醫院於1994年設立糖尿科專科門診，當時以服務老人科為主。早期的糖尿病教育工作由醫生及病房護士(DM Link Nurse)兼任，隨著病患者日益增加，於1997年增聘全職專科護士，與內分泌及糖尿病專科醫生、營養師、足病診療師、物理治療師等組合了專業團隊。

隨著病患者漸趨年輕化，醫院於2000年開設青年糖尿病診所；教育項目亦糅合舊傳統與新發展，透過專業團隊及與社區合作，為糖尿病患者提供全面的診症、知識教育、自我管理、心理諮詢及週年併發症普查等服務。

❖ 糖尿科護士診所

護士診所位於醫院的專科門診部，由兩名糖尿科護士專責主理，在糖尿病的預防、治理、及自我管理作出指引及給予健康輔導，與醫生一同跟進療理計劃。服務包括評估病人的健康狀況、處理病患、健康建議、自我監察血糖及控制體重、適時轉介、電話諮詢及定期服藥跟進，安排病友的教育活動及培訓護士等。

律敦治醫院的糖尿科護士診所於去年取得醫院管理局的認證，是首批通過考核評審的護士診所之一。

❖ 律敦治醫院的特色糖尿病教育服務

『糖尿錦囊』是全日制的基礎課程，由跨專業團隊作綜合性的糖尿病教育，透過午膳讓參加者瞭解飲食份量及健康烹調法，協助病患者將飲食控制、運動療法、藥物治療及血糖監測等糖尿病治理元素整合融入於日常生活中，以延緩併發症的發生及提升病人的生活質素。

『糖尿錦囊進階』是半天的深化課程，透過食品選擇、運動體驗、藥物調節等互動學習，旨在提升自我管理病情的效能。課程鼓勵家人出席，發揮預防糖尿病及協助患者的雙層功效。

『健糖會』是病友及家屬的互助組織，成立至今十二年。活動由病友委員籌辦：新症病友分享會、生日會、新春團拜、書法國畫班、普通話班、冥想班、講座、烹飪示範、郊外旅行等，以促進心理社交健康。**『健糖會』**會友亦積極參與醫院管理局的病友研討會、香港糖尿聯會及香港復康會的活動。

『太極氣功十八式』及**『楊家太極廿四式』**多年來由熱心會友推動運動療法，大清早於醫院的復康花園集合，也吸引了一群醫院員工上班前一同耍太極呢！

『糖尿領袖』是一群成功管理病情的糖尿病患者，有志於把控病心得跟病友分享，亦有同理心分擔病友的感受，而其**『過來人』**的身份使其比醫護人員更有說服力去促使患者提升控病的正能量。醫院為這一批糖尿病模範病友提供了一系列的培訓課程，包括輔導技巧及溝通技巧等，來協助醫護人員指導病友。他們助人自助的**『同路人』**身份使其從〝病患者〞的受助人角色昇華至義務的醫療服務施予者。

『心理社交治療工作坊』是與香港中文大學社工系實習學生合作的心靈輔導系列：壓力紓緩、行為認知、敘事療法等，每年都透過不同活動注入治療元素，帶出新鮮感。

『糖尿科互動網』是香港大學資訊管理實習學生的最新作品，院友可透過醫院網頁定立運動目標及取得指導、輸入血糖數據即時獲取專業意見、不需走進醫院診所也可與醫務人員及病人交流的聊天區，個人化健康資訊可以不受時空的限制而垂手可得。

❖ 以人為先、專業為本的團隊協作

律敦治醫院的糖尿專科醫療團隊透過分享科研報告的定期聚會(Journal Club)互相交流，團隊亦邀請了病友加入討論與分享，在採納客觀實證作治療之餘亦兼顧患者的主觀感受。慢性疾病管理既是科學與藝術的結合，亦要是情理兼容的模式。

AHKDN Chat Corner

1. 健康要自主、「營」仔「營」女齊作「煮」: 29th March 2009





An unconventional activity on "Healthy Cooking Demonstration for Youth with East Meets West Cooking Style - 健康要自主、「營」仔「營」女齊作「煮」！" was held at Prosperous Garden Baptist Nursery School, Yau Ma Tei, Kowloon. A total of 108 nearby primary school students, parents and teachers have participated the event. Our honorary speaker, Mr. Joseph Poon (Uncle Joe) from Philadelphia USA, who has shared with us his valuable experience of cooking skills and inspired us a lot of healthy eating concepts. It was so rewarding that every participant enjoyed a wonderful and fruitful afternoon.

活動後問卷調查結果

當日共收回49個家庭的『活動後問卷調查』，接近八成(75%-81%)的參加者表示非常滿意整個活動的內容和安排，並表示會再次參加同類的活動。大部份參加者認為這次活動非常成功，因為不但可以看著Uncle Joe示範食譜，部份參加者更有份參與製作，又可即場試食，加上當日Uncle Joe 的生果雕刻技術更令全場嘆為觀止，氣氛十分愉快。大家一致認為食譜很有創意，材料簡單而且營養豐富，製作容易; 有受訪的小朋友表示很喜歡當日的食譜示範，回家會自己嘗試製作。參加者認為這次活動能有效地推動健康飲食的信息，提議將來可舉辦有關『食物營養』、『烹飪班』、『小孩減壓方法』... 等活動。

Program Organizing Committee: Ms Harriet Chung, Ms Holly Tang, Mr Leung Sum Ming, Ms Emmi Chik
Moderator: Ms Tammy So

2. The 4th AHKDN Educational Seminar: 24th April 2009



The 4th AHKDN Educational Seminar "**Application of the Patient Empowerment Philosophy:** Experience Sharing on **ABC Program**" was held at Diabetes Centre of Kwong Wah Hospital. A total of 44 diabetes nurses from various centres and HA delegates attended the seminar. It was a great opportunity for us to meet together and shared our experience and knowledge in diabetes.

Moderator: Ms Jo Jo KWAN
Speakers: Ms Eva Kan, Ms Tammy So, Ms Wan Chow Man, Ms Maggie Lau, Ms May Chan, Ms Maisy Mok, and Ms Winnie Cheng

3. The 1st AHKDN Annual Meeting: 27th June 2009



The theme of our 1st AGM was "Diabetes Education: Past and Future (講古講今)". Dr Tsui Ip Shing and Professor Frances Wong had inspired us so much on the topic of 儒佛道與糖尿病教育. Beside that we had Ms Eva Kan to share findings and experience on the pilot study of HA commissioned project "A Pilot Study to Evaluate the Process & Outcome of a Patient Empowerment Program". And we also had the 1st Outstanding Achievement Award Presentation. All invited guests and our members had learnt a lot and enjoyed the night with fun.

Group photo (Kowloon Shangri-la Hotel)



Guest speakers: Dr Tsui Ip Shing, Prof Frances Wong





Outstanding Achievement Awards Awardees: Ms Harriet Chung, Ms Tammy So

4. Renewal of membership & welcome the new comer

Our web site www.ahkdn.com has been updated recently. You can catch up the most updated news about our activities, seminar information, and download the membership form on the web. Welcome to join us and give your valuable suggestions E-mail: ahkdn.ltd@gmail.com.

5. Demonstrating leadership in diabetes education

- We published the 1st Diabetes Nurse Clinic Intervention Guideline.
- We have been accredited as a CNE provider on 12 March 2009 by Hong Kong Nursing Council.
- We participated in preparation for specialty accreditation program in Hong Kong, started to prepare for our first APN course in Diabetes Curriculum.
- We advised on running of the 2009 GOPD course for Risk Assessment and Management Program(RAMP), the Diabetes Post Registration Certificate Course 2009.

Case Study: Management of Uncontrolled Type 2 Diabetes in the Nurse Clinic

Loo kit Man
Nurse Specialist (Diabetes Care)
Prince of Wales Hospital

The following case study illustrates the clinical role of a diabetes nurse specialist in the management of a patient with uncontrolled type 2 diabetes.

Medical and social background of the patient

Mr Au is a 58 years old man and works as a decorative worker. He is an ex-smoker and ex-drinker. He is living with his daughter aged 20 who is working as well. His wife passed away a few years ago. He has had Type 2 DM since 1999 and used oral anti-diabetic agents initially with addition of supplementary insulin therapy from 2003. His diabetes regimen has been further switched to twice daily insulin injection since 2007. Apart from Type 2 diabetes, he also has Cryptogenic Cirrhosis complicated with portal hypertension & Splenomegaly (Grade A under Child-Turcotte-Pugh classification). He has regular follow-up at both the Diabetes and the Hepatology Specialized Out-patient Clinics.

Medical Management

Problems identified:

1. Poor glycaemic control with high HbA_{1C} 13.8%
2. A discrepancy between his HbA_{1C} and home blood glucose measurements. Most of his home blood glucose results throughout the day were 7 to 7.5 mmol/l which was not correlated with his high HbA_{1C} results.

Medical management plan :

1. He was referred to see diabetes nurse for education and reinforcement
2. He was scheduled to have clinical admission to medical ward 5 weeks later to sort out the compliance issue as well as work out for insulin requirement. In the meantime, there was an increase in the insulin dose to Humulin N 30 units om & 10 units pm (previous dose was Humulin N 28 units om & 8 units pm) with continuation of Diamicron 160 mg twice daily as well as other medications such as Adalat Retard, Losartan and Aldactone
3. He was scheduled to be reviewed in the Diabetic Clinic again 16 weeks later with prior blood taking for lipids profile, HbA_{1C}, renal and liver functions test 1 week before follow-up

In the Diabetes Nurse Clinic

1st nurse-patient encounter upon appointment booking with diabetes nurse specialist

He had completed a DM education Programme in 2000 but he was referred to see diabetes nurse again due to starting of insulin treatment in 2003, he defaulted DM education then after the first visit. Having understood his previous diabetes educational and medical background as well as the management plan of the doctor, I explained to him about the importance of self-monitoring of blood glucose (SMBG). If he could clearly demonstrate the real pattern of the blood glucose level throughout the day, he might not be required to be admitted. He was encouraged to perform SMBG at least 4 times pre-meals a day but one to two days per week. I offered him a nurse clinic appointment 4 weeks later which was one week prior to his scheduled clinical admission.

1st Individual education and counseling

Nurse Assessment

(A) Medical and Social Background

Results of the latest laboratory tests were as follows: HbA_{1C} in recent 18 months: 13.8%, 13%, 9.1% and 10.5% respectively (normal range is 5.1% to 6.4%), Hb 11.9 g/dL (normal 13.2 to 16.7 g/dL) so there was a negative bias in his HbA_{1C} measurements due to a mild drop of Hb level; Serum Cr: 119 umol/l (normal 62-106umol/l). Urine alb/Cr ratio: 14.2 mg/mmol (normal <2.5mg/mmol/l for male). Lipid profiles were normal. His body wt was 70.6kg, BH 1.66m, BMI 25.62.

(B) Daily routine

He wakes up at 8:30am and gives injection at home. He always eats out and seldom cooks as his wife passed away and his daughter is working. He usually takes typical restaurant breakfast or sandwich and a cup of tea with sweetener. At lunch time, he usually takes a half meal box of rice and a bowl of soup. He has his dinner at 8pm during which he takes a half meal box of rice together with an orange. He gives insulin injection at 9pm. He rated there was an improvement in his diet control as eating of less rice. However, he claimed he had no time and also too tired to do exercise.

(C) Insulin injection skill assessment:

When I reviewed his insulin pen injection skill, I noticed that he might have inserted the pen needle at a too acute angle especially using a 8mm pen needle and he was overweight. However, he stored insulin in a proper place and re-suspended insulin before use. There was also no abnormality on his tummy as regular rotation of injection site.

(D) SMBG

His CBG readings in the past one month: fasting were 11 to 13mmol/L while pre-dinner measurements ranged from 16 to 17mmol/l; his SMBG skill corrected with spot CBG measured 16.8mmol (2hrs post breakfast). He forgot to bring his own blood glucose analyzer. He has no hypoglycaemia during the month.

(E) Problems identified

He claimed that he had improved dietary and good drug adherence. Based on his medical history, laboratory results and nursing assessment, the following diabetes-related problems were identified: (1) persistently poor glycaemic control (2) microalbuminuria and elevated plasma creatinine ; (3) wrong timing of pm insulin injection; (4) too-acute-an-angle injection skill may result in intradermal injection and hence slows insulin absorption; (5) overweight with absence of ankle oedema.

(F) Nursing Management

I appreciated his effort in SMBG. His profile showed a realistic pattern and much better correlated with his high HbA_{1C} results. I offered him a choice between admission to medical ward for stabilization and management by my nurse clinic. I was confident of managing his glycaemic control by adjustment of insulin dosage or by changing of insulin regimen based on his CBG results with the back up of our centre endocrinologists. However, he had to increase the frequency of SMBG in addition to the pre lunch & bedtime checking. To my anticipation, he preferred to be managed at my nurse clinic. I therefore informed the referring doctor and cancelled the clinical admission. I explained to him in details about the risk factors he was now facing with. I went through with him regarding his glycaemic indices and kidney functions in the recent 2 years so that he had a thorough picture about his current health status. I reminded him to give insulin pre dinner and revise his insulin injection skill. I also increased his insulin dose by 2 units both in the morning and in the evening.

2nd Individual education and counseling (5 weeks later)

His body weight was 77.2kg (BMI 28). To my surprise, he gained 7 kg in 5 weeks time. His diet pattern was found remaining unchanged. His weight gain could be contributed from his improved glycaemic control. He gave insulin at the right time and in corrected skill. He had occasional nocturnal hypoglycaemia. He did CBG monitoring four times as suggested. His CBG pattern showed that there was an obvious glucose rising from fasting to pre-lunch and pre-dinner to bedtime. I grasped this chance to explain to him about his current insulin action which was less desirable to him and the use of a pre-mixed insulin regimen might be benefit. I informed my centre endocrinologist and switched his insulin regimen to Humulin 70/30HM twice daily with slightly decrease in the dose. Table 1 showed the CBG pattern (in mmol/l) of this patient.

Date / H'stx	Fasting	Pre-Lunch	Pre-Dinner	Bedtime
4/8	8.7	6.8	10.7	9.9
10/8	3.4	12.3	3.7	8.9
18/8	4.6	9.1	6.3	8.8
24/8	4.1	10.4	6.1	7.2
31/8	4.1	5.5	8.6	----

Table 1

3rd Individual education and counseling (9 weeks later)

His body weight was 78.6kg (BMI 28.5). His HbA_{1C} dropped from 13.8% to 6.1% within 3 months which had never seen in the history of his diabetes life since the availability of the Clinical Management System in the Hospital Authority. His SMBG profile fasting 3.5 to 5.4 mmol/l, pre-lunch 5.1 to 6.7 mmol/l, pre-dinner CBG 4.8 to 7.9 mmol/l, Bedtime: 7.1 to 9.2 mmol/l. He could still maintain 4 times a day SMBG monitoring. Both the patient and I were so excited about the great improvement. On this visit, I summarized and reviewed the important points of self care of diabetes such as explanation of various factors affecting the blood glucose levels, sick day management; blood glucose readings interpretation and self insulin adjustment principles. Although his glycaemic index had been treated to target but was obese that he needed to pay attention on weight reduction. I closed his file and advised him to call me in case of any problems in managing diabetes.

Discussion

It has been eight months since my completion of the educational visit for this patient. I retrieved his HbA_{1C} record and found the recent result was 5.8%. (Again there was a negative bias of HbA_{1C} measurement due to a mild drop of Hb). What are the factors contributing to the significant improvement in HbA_{1C} measurement for this gentleman after 3 nurse-patient educational encounters in 3 months time? Is it simply due to the improvement of injection skill, or giving insulin at right time or even choosing the right insulin regimen? Maybe all of them are true. I believe that it may also be a result of the increase of patient's participation in own diabetes care. He decreased the amount of food consumption and increased the frequency of SMBG. SMBG is vital in diabetes management for both patients and the health care professionals. It enables the patients to realize that

even in the state of hyperglycaemia, the warning symptoms may be absent and that why diabetes complications can be developed silently.

In addition, without sufficient CBG data to be based on, it is difficult to let the patient to realize own risks followed by the self-initiation of lifestyles and behavioral modification. Apart from the usual skill assessment, a thorough understanding the health beliefs of the patients, whether he or she is optimistic or pessimistic, and status of family and financial support, reasons and obstacles of non-adherence. In addition, patient's response and attitude towards his health and life can guide us to adopt an appropriate educational strategy and management plan to achieve a successful diabetes education and management outcome.



專業推介

Conference / Seminar	Commence Date	Web-site
International Diabetes Federation (IDF) 20th World Diabetes Congress; Montreal, Canada	18-22 Oct 2009	http://www.worlddiabetescongress.org
14th International Congress fo Endocrinology (ICE); Kyoto, Japan	26-23 March 2010	http://www.congre.co.jp/ice201
American Diabetes Association (ADA) 70th Scientific Sessions; Orlando, Florida, USA	25-29 June 2010	http://professional.diabetes.org/
Course	**Date**	**Web-site**
Basic Course in Diabetes Management and Education (CUHK); may apply individual symposium	Sept 2009 to Feb 2010	http://hkfrdd.org/bcdm0910
Recent Advances in Diabetes Education & Management (AHKDN)	Jan 2010	http://www.ahkdn.com
Activity	**Date**	**Web-site**
Walk for Diabetes 2009 (Diabetes Hongkong) -- The Peak	15 Nov 2009 (AM)	www.diabetes-hk.org Tel: 2723 2087

Journal Article (Diabetes Nurse Consultant and Nurse Clinic)

1. Funnell, M. M. et al. (2008). National Standards for Diabetes Self-Management Education, *Diabetes Care*, 31: S97-S104.
2. Martin, A.L. et al. (2008). Insights and Trends in Diabetes Education, The Diabetes Educator, 34(6): 970-986.