

Implementation of a patient decision aid on type 2 diabetes: Opportunities and challenges faced by healthcare professionals in Malaysia

Authors

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Background

- Patient decision aids (PDAs) are tools which aim to help people participate in decisions
- It involves patients weighing the benefits and harms of each treatment options and understanding the scientific uncertainty
([Stacey, Bennett et al. 2011](#))
- Evidence shows that PDAs improve patient decision making including knowledge and lower decisional conflict compared to usual care
([Stacey, Bennett et al. 2011](#))
- Globally, there are at least 500 PDAs on a variety of medical conditions
([Patient Decision Aids Research Group](#))

Stacey, D., C. L. Bennett, et al. (2011). "Decision aids for people facing health treatment or screening decisions." *Cochrane Database Syst Rev*(10): CD001431.

Patient Decision Aids Research Group. "Decision Aid Library Inventory (DALI)." Retrieved 30 January 2013, from <http://decisionaid.ohri.ca/cochinvent.php>.

- However, there is a wide variation in the implementation of PDA.
([Gravel, Legare et al. 2006](#)).
- Common barriers include:
 - lack of training on shared decision making
 - difficulty in identifying patients who should use the PDAs
 - a lack of time to distribute the PDAs
 - poor clinician support([Feibelman, Yang et al. 2011](#); [Rashidian, Nedjat et al. 2013](#))
- Only 10- 25% of sites reported sustained use of PDAs
([Feibelman, Yang et al. 2011](#); [Lin, Halley et al. 2013](#))

Objectives

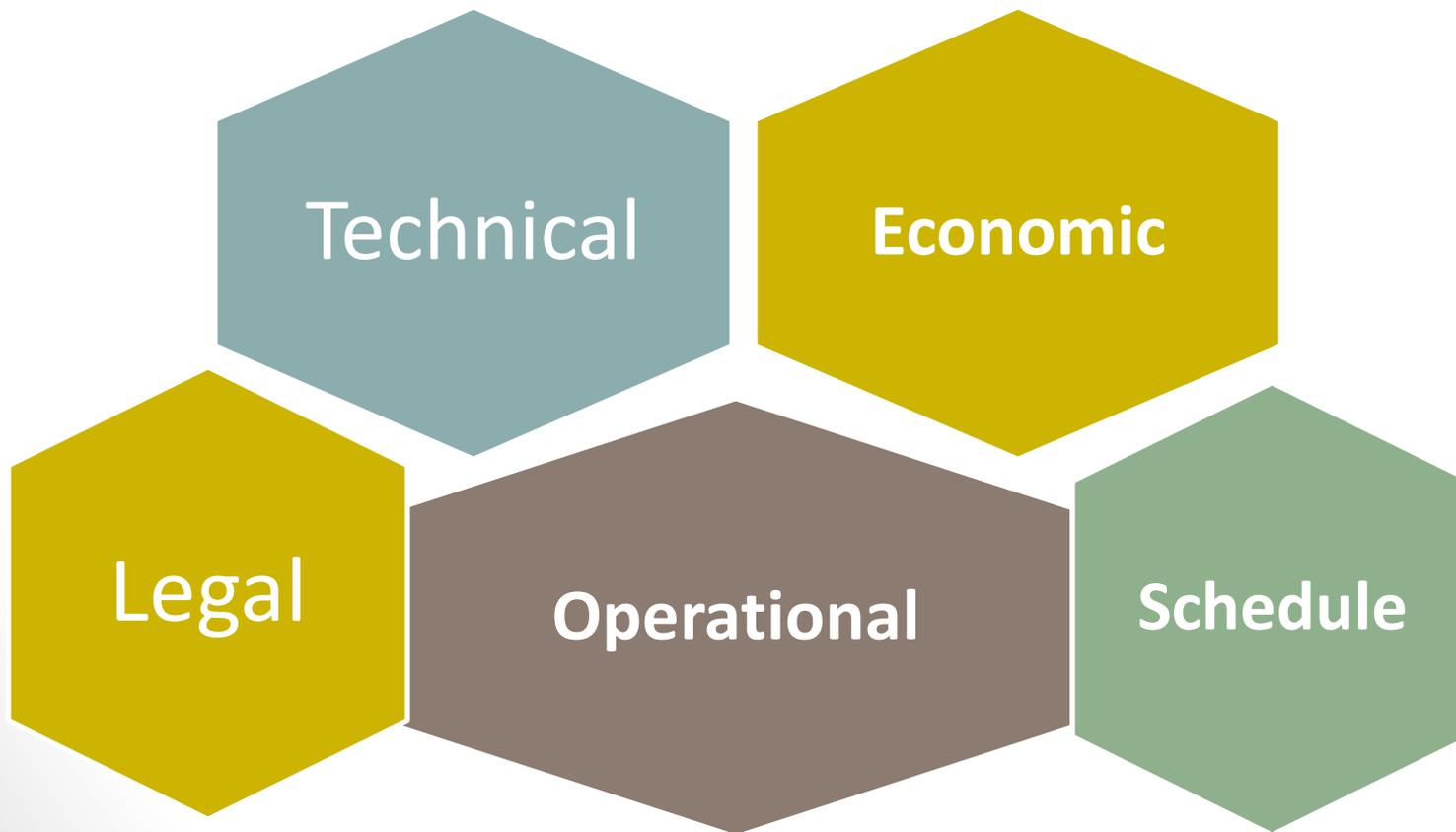
- To examine the processes in which the HCPs and the patients used the PDA in the clinical setting
- To identify the barriers that hindered the use of the PDA
- Rationale:
 - Understanding the methods, contexts and barriers to PDA usage are important in developing strategies to integrate PDA use into routine practice and improve sustainability.

Methods

- A qualitative study design
- **Setting:** Public and private primary care clinics in two states (Selangor and Negeri Sembilan)
- **Study period:** 2012-2013
- **Data collection:** 1) 26 in-depth interviews
2) 2 focus group discussions (5)
- **Interview:** -after completing a consultation session using the PDA.
-semi-structure topic guide
- **Inclusion and exclusion criteria**
 - All HCPs who had attended the training workshop were eligible
- **Sampling: Purposive sampling**
 - HCPs recruited patients to participate in the pilot testing of the PDA
 - Purposive sampling was used to capture a range of practice settings (healthcare system, location)

Conceptual Framework

- Topic guide developed based on five areas of feasibility (Taylor 2007)



Methods (cont.)

- **Data collection:**
 - Pre-consultation: Pre-consultation form
 - Consultation: Consultations were audio-recorded
 - Post-consultation: Post-consultation form, qualitative interview
- **Data analysis (post-consultation interview)**
 - The post-consultation interviews were transcribed verbatim
 - Data was analysed using a thematic approach with Nvivo9
 - Three researchers developed the transcribing framework and this was used to code the remaining transcripts
- **Ethics:** Med Res Ethics Comm MOH & Med Ethics Comm UMMC

RESULTS

Participant profiles

- **HCPs (n=13)**
 - 12 females
 - Medical officers, general practitioners, nurses, pharmacist
 - 10 from public sector
- **Patients (n=17)**
 - 10 females
 - Age ranged from 35-74 years old
 - Duration of diabetes ranged from 1-34 years

Overview of results

- Implementation of the PDA was discussed in two areas:
 - A. Descriptions of using the PDA in consultations
 - Cover-to-cover OR picking-and-choosing
 - Using different language versions
 - Using the PDA with the family
 - B. Barriers to using the PDA
 - medico-legal concerns
 - Short consultations
 - patient visual impairments

Using the PDA in consultations

Picking and choosing

HCP said it was hard to cover the whole PDA in one sitting.

We can use it (PDA) but we have to be good at pick and choose, we cannot take all...we cannot do it in half an hour because when we see patient, we have 5 to 10 minutes.
Medical officer, public health clinic

HCP *deliberately* avoided sections on the treatment options
- already decided the patient should use insulin

Almost all the pages I did go through with him, except when it came to advantages and...disadvantages and give him options. So here it was already we have decided to give him insulin... So I didn't want to go through again the other options.
General practitioner, private clinic

HCP focused only on patient's main concerns

I think from one page to one page is too long, maybe during consultation you won't go from one page to another, we only address the main problem right?
Medical officer, public health clinic

Language versions

- HCPs used different language versions to bridge the language communication gap.

Interviewer: Did you use the Tamil one or English PDA?

MO: I use the Tamil one, I mean I open the page of the Tamil one for her and then because the consultation was conducted in English, I spoke to her in English.

Medical officer, public health clinic

Using the PDA with family

- Two reasons for involving the family when using the PDA:
 - the family held the main decision making role,
 - the patient had low literacy (family to explain the PDA to them).

But with the patient just now, I told her to bring your child next time, so that we can discuss together. If we only discuss with her, if the decision maker is the son, it's difficult. So they have to bring the family along and then after that, we give them the book

Medical officer, public health clinic

B: Barriers to using the PDA

- The following were identified as barriers to using the PDA:
 - Time constraints (short consultations)
 - Patient visual impairments
 - Potential medico-legal issues

Medico-legal concerns

- Three possible medico-legal concerns :
 1. the patient could use the PDA as a **reason to refuse insulin**,
 2. the patient may **misinterpret information** provided in the PDA,
 3. the PDA may **become out-of-date** in light of new research findings.

Yes, that booklet actually the facts inside there is quite precise according to the guideline but **how is the patient interpret it? It's a problem; we don't know how is the patient interpret.** Maybe like HbA1c 6.5 they really aim 6.5 then they will inject more or anything, I am not sure whether they can sue us for that or not.

Medical officer, university-hospital based
primary care clinic

Discussion

- PDAs are often advocated as a way to reduce unwanted variation in healthcare practice
(O' Connor et al, 2004).
- However, there was considerable variation in how the HCPs used the PDA in consultations despite standardized training.
- This is to be expected as most HCPs had never heard of SDM or PDAs before.
- Strategy → To increase awareness:
 - credit courses (nursing and medicine),
 - continuing education
 - interactive workshops,
 - performance feedback
 - structured protocols in providing decision support

(O' Donnell et al, 2006)

Discussion (cont)

- Similar medico-legal barriers to PDA implementation were reported in other studies:
 - concern that PDAs would be outdated
(Graham et al 2003)
 - increased risk of legal action if SDM was practiced
(Gravel & Graham, 2006)
- Strategies:
 - setting up a local database with information on the latest versions of the PDA (A to Z inventory)
 - Teaching HCPs to evaluate PDAs with CREDIBLE (Competently developed, Recently updated, Evidence-based, Disclosure of conflict of Interest, BaLanced and Efficacious)
(O' Connor et al 2004)

Graham I.D., Logan J., O'Connor A. et al. (2003) A qualitative study of physicians' perceptions of three decision aids. *Patient Education and Counseling* 50, 279–283.

Gravel, K., Legare, F., & Graham, I. D. (2006). Barriers and facilitators to implementing shared decision-making in clinical practice: a systematic review of health professionals' perceptions. *Implement Sci*, 1, 16

O'Connor A.M., Stacey D., Entwistle V. et al. (2004a) Decision aids for people facing health treatment or screening decisions. *The Cochrane Database of Systematic Reviews* 2003, Issue 1. Art. No.: CD001431. doi:10.1002/14651858.CD001431.

Conclusion

- SDM and PDAs are novel concepts, especially in developing countries
- Promoting awareness of SDM principles is important to ensure that variations in the usage of PDAs do not undermine shared decision making

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