**Basu Sharma Ethical dilemmas in diabetes care**

Review Comments:

1. The paper does an important job in bringing light to the fact that there's very little research in resource poor settings, for the management of common and treatable diseases like diabetes. The ethical issue being addressed is balancing desiring to rapidly improve glycemic control (beneficence, to minimize diabetic complications) with minimizing iatrogenic hypoglycmia (non-maleficence) in a complex clinical environment with many barriers that patients face.
2. I found the article to be topical: specifically it discussed the issue from the Indian perspective, involves a common disease which effects large proportion of population and any health professional should be familiar with. I think that with some modifications the article can be made to influence policy and practice. You outline a dilemma the physician faces but walk away before suggesting any solutions.  a) we have a treatable disease b) we have effective drugs c) we are limited in giving appropriate therapy to patients because of limited physician time, supplies, drugs. The dilemma that you are arguing arises because primary healthcare continues to be underfunded in this country. ***If our government is serious about improving the health then we will need more money to PHCS so that PHC doctors can better manage chronic diseases like diabetes. We will need supplies, insulin, other medications free of cost.***

I agree that more research needs to be done***, more research always needs to be done, but to me this is more of an implementation science issue and funding issue.***

1. The authors seem to appropriately cited a good number of studies. I'm unaware of other papers that address the current authors’ argument. It may be useful to cite any studies from other low resource settings if available. For example, have Thailand or Ethiopia come up with useful solutions to managing diabetes? How about MSF in their various refugee camps?
2. I disagree with the extreme framing of medication non-adherence in this context- it sounds as if you are blaming patients for not taking their medications when in fact the major issue continues to be 1) medication costs often exceed patient out-of-pocket ability to pay  ( e.g. there's no  insurance coverage for outpatient particularly our state of Chattisgarh); 2) medication quality in particular insulin is not guaranteed and patients have no way of keeping insulin refrigerated; 3) Limited literacy rates make an injection of insulin difficult 4)  Patients cannot afford glucometers to manage insulin use (or testing strips) and many cannot read or interpret the results and these are not supplied free of cost 5)  Costs of follow up visits including both direct costs (transportation, medication, visit payment) and indirect costs (loss of wages for work) are substantial. We should be clear that these factors are imposed on patients by their destitution and poor primary health conditions in this country.
3. The article contains some loose generalizations. Poor accountability of the health care systems can’t be couched as ethical dilemmas.
4. It is a brief comment, and there are no prescriptions for possible solutions  
   1) In the abstract author mentions “aggressively lowering … presents a known ethical dilemma”. I suggest that the authors expand on what an ethical dilemma is in the abstract briefly (crux of the paper) and not say that it is \*known\* (title : “under-recognized ethical dilemmas”).
5. I offer a few suggestions based on my experience— the Important part of diabetic management is glycaemic control addition to drugs, patients need extensive counselling and in particular lifestyle changes to the diet is very key. Do we have dietary recommendations that are culturally acceptable for these patients who are also very poor?  How do we counsel patients who are living on almost nothing and just getting food from the PDS?
6. One of the most common ethical dilemmas arises in the balancing of beneficence and non-maleficence.  This balance is the one between the benefits and risks of treatment and plays a role in nearly every medical decision such as whether to order a particular test, medication, procedure, operation or treatment.  By providing informed consent, physicians give patients the information necessary to understand the scope and nature of the potential risks and benefits in order to make a decision.  Ultimately it is the patient who assigns weight to the risks and benefits.
7. Although most research has occurred in high and middle income countries, the concept of shared decision making is entirely consistent with the priorities of low income settings—that is, to improve health literacy, improve patient provider communication, and empower individuals to be more involved in their healthcare. United Nations. Health literacy and sustainable development.( UN Chronicle , 2009.

www. un.org/wcm/content/site/chronicle/cache/bypass/home/archive/issues2009/ 26 ).

Healthcare in low income countries is often constrained by limited human and physical resources. Literacy levels among patients may be low and cultural factors may require communication strategies that are more inclusive of family and friends. New innovations using mobile phone technologies have recently become more common in low resource settings, although most have been unidirectional—either collecting data or issuing reminders or health promotional material. ( health,literacy and sustainabledevelopment. 27 World Health Organization. Health: new horizons for health through mobile technologies. 2011. [www.who.int/goe/publications/goe\_mhealth\_web.pdf](http://www.who.int/goe/publications/goe_mhealth_web.pdf). ).

There is real potential for these to become more interactive and provide a platform for shared decision making in low income countries.

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