Cash Transfer Perceptions and Spending Patterns in the Context of an Incentive-based HIV Prevention Trial in Tanzania

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Conditional cash transfer programs, if effective, can both incentivize a desired behavior or behavior change, and slow the intergenerational transfer of poverty through providing increased income to poor families. This assumes that the cash awarded for engaging in (or avoiding) the conditioned behavior is spent on goods and services that positively impact the beneficiary and his or her family—for example purchasing medical care rather than alcohol or cigarettes. Debate relating to whether cash or in-kind transfers are more effective centers around whether participants use the cash transfer in positive or negative ways (Devereaux, 2002; Gitter&Barham, 2008). To further our understanding on spending patterns of beneficiaries of cash transfers, this paper uses both qualitative and quantitative data from a randomized, controlled HIV prevention trial of cash transfers conditional on negative STI tests in a rural Tanzanian population. CCTs have been applied extensively across an array of social policy arenas in Latin America and less frequently in Sub-Saharan Africa, but have only recently been implemented as an HIV prevention intervention (Lagarde et al, 2007; Gertler& Boyce, 2003; Thornton, 2006; Thornton & Kohler, 2009). The purpose of this paper is to explore how the cash from the transfer was perceived among beneficiaries in terms of amount and timing, how the cash transfer was spent, if beneficiaries generally shared the award with partners, if and how the award has changed the lives of beneficiaries, and possible negative and positive effects of the cash award. Some previous research has examined how income from cash transfers is spent in the household, and found significant differences in spending patterns by gender, education level, and level of poverty (Maitra& Ray, 2003; Rubalcava et al, 2004) . We aim to explore differences in spending patterns in the context of the RESPECT study by addressing the following research questions with this analysis:

1. Generally, what are the spending patterns in this rural Tanzanian population, and do these patterns differ by gender?
2. Among those who received the reward, what is the reward money being spent on and are there differences in spending patterns by gender and high vs. low-value reward?
3. How do study participants perceive the reward in terms of amount and timing?
4. What are the negative and positive impacts of the reward among recipients and how, if at all, has the reward motivated or contributed to sexual behavior change?

Methods

The results reported in this manuscript originate from data collected from a randomized, controlled trial (the RESPECT study) of a cash transfer conditional on negative STI tests at 4-month intervals over 12 months in all. The trial took place in Kilombero and Ulanga districts of Tanzania. The purpose of the RESPECT study was to understand the effectiveness of cash rewards, conditional on having negative tests for STIs, on prevention of risky sexual behaviors among young men and women in rural Tanzania. Study participants age 18 to 30 residing in ten villages within these two districts were randomly selected for participation. The study recruited approximately 2400 participants, approximately 240 in each of the 10 study villages.

Upon enrollment, all participants were randomized into either the intervention or control arm. All participants in both arms received free STI testing and counseling, and free STI treatment if needed at baseline, and at months 4, 8 and 12 and 24 of the study. In addition, all participants were tested for HIV at baseline and again at 12 months. Persons testing HIV-positive were referred for care and treatment, but retained in the study. Those in the intervention group received the conditional cash transfer upon receiving negative test results for selected curable STIs at months 4, 8, and 12. The control arm was not eligible to receive the cash award at any of the visits. All participants in both arms were offered a psychosocial intervention, comprised of regular group counseling. Half of the participants in the intervention arm received approximately $10 per award cycle, and half received approximately $20 per award cycle if they remained negative. Quantitative questionnaires were administered at all study visits.

The RESPECT study included a qualitative component: in-depth interviews were conducted with a sample of study participants at each study round. The qualitative study participants were recruited from four of the ten villages that were participating in the RESPECT study. The four qualitative villages represented a range of semi-urban to more rural,

and ranged from 15 minutes to a 2-hour drive to Ifakara, the main urban center in the district. We used stratified random sampling to select the qualitative study participants at baseline. In each village, the strata of interest were gender, marital status, and intervention/control group. We over-sampled from the treatment group as we were interested in hearing more experiences relating to how the money did or did not motivate sexual behavior change. Qualitative participants received a small cash payment equal to approximately $3 USD at the end of each interview to reimburse them for transport and extra time spent at the study station. Interviews took place at the study station in tents or secluded areas.

We use data from the in-depth interviews and structured survey conducted at the 12-month follow-up visit of the study to explore how the cash from the transfer is perceived among beneficiaries in terms of amount and timing, how the cash transfer is being spent, if beneficiaries generally share the award with partners, if and how the award has changed the lives of beneficiaries, and possible negative effects of the cash award.

Results

Quantitative Results

Table 1 shows income, spending and wealth reported at the 12-month follow-up visit among the 2,419 RESPECT study participants. Participants here were reporting results for the previous four months of the study, for example income in the previous 4 months, spending patterns in the previous 4 months, and wealth, defined here as savings that could be spent, in the previous 4 months. The mean income was about $35 over the 4-month period, and expectedly, was significantly higher for men compared to women. The amount of savings that could be spent was also significantly higher among men than women, and men spent on average about twice as much over the previous four months as women ($40 compared to $20). General spending patterns defined here as proportion of total income spent on various categories of goods, did not differ markedly by gender. Most money was spent on schooling (for self or child), business, or parents. When we look at these differences by intervention arm , we see that while reported income over the previous 4 months did not differ by arm, those in the high-value arm spent significantly more than those in the control arm. Spending patterns differed as well. Those in the high-value arm also spent more of their income on school, saved more compared to those in the control arm, and invested more in farming equipment (data not shown).

Among those in the low and high-value award groups, we also asked specifically what they spent the reward money on (Tables 2 and 3). We also see some gender differences here – women were more likely to spend the reward money on durable goods while men were more likely to report spending it on schooling. Interestingly, those in the high-value award group were more likely to report spending the award money on investing in their farm or business compared to those in the lower-value reward group, while those in the lower-value reward group were more likely to report spending the reward on everyday goods (Table 4). Very few people reported adding the reward money to their savings.

The reward was generally felt to be a motivator for behavior change with over 70% of participants in the reward arms reporting “very much” when asked, “*How much does the reward motivate you to change your behavior?*” There were no gender differences in responses to this question, however, those in the lower value reward group were less likely to respond “very much” compared to those in the high-value award group.

Finally, respondents were asked whether or not they would share their reward with their partner or spouse. Interestingly, very few respondents reported being willing to share all of their reward. Women were more likely than men to report being willing to share none of the reward with a partner or spouse. There were no differences in willingness to share the reward by intervention arm.

Qualitative Results

Tables4 and 5 show selected quotes that reflect the overall trends in the qualitative data as they relate to spending of the reward money and outcomes of receiving the reward money. The analysis highlights the context in which men and women were spending the award money and the outcomes of how the money was spent. The qualitative data indicate that men often mentioned investing the reward money in existing businesses or to expand their farms, while women discussed spending their reward on home and family-related goods. Men who also spent their money for home-related goods discussed about their spending in the context of their wives, for example, “*I will buy my wife clothes and the rest of it I will buy food for my family*”, while women mentioned spending money on themselves and their families directly. There was a perception that some men were more likely to spend their money on ‘luxury’ items including alcohol or increasing their number of sexual partners.

The way in which men and women spent their award money had further outcomes on their motivation to return to the study, their relationship dynamics, and their motivation and ability to avoid unsafe sex. Interestingly, the participants’ discussion surrounding the award money suggests that it changed their relationship by increasing marital fidelity. If the couple struggled financially, the wife was more likely engage in transactional sex to supplement their income. With the

award money, couples have the financial ability to stay faithful to each other. As one woman stated, " *If you can get your needs, why go outside your marriage? If you cannot get your basic needs you go out looking for someone who can help you get them. For example if get money to buy food, flour why should I go for problems?*".

Men and women spoke differently about how the award influences their avoidance of unsafe sex. The award money appears to function as a motivator for men to remain infection-free at the study follow-up session, while having the award money functions as a tool to empower women to negotiate their sexual situations and to avoid unsafe sex.

Conclusions

While the large majority of reported spending is on everyday goods--"livelihood protection", the second most frequently reported use of the cash transfer is on "livelihood promotion" in the form of investing in farms or businesses. Interestingly, those receiving the higher value cash reward were more likely to invest the money in business while those receiving the lower value reward were more likely to spend it on everyday goods, perhaps indicating that the lower value reward was not quite enough to spend on promoting livelihoods. Gender differences in spending patterns showed that women were more likely to spend money on household goods while males were more like to invest reward money in schooling. Interestingly, there were no differences by gender in spending on investing in farm or business in the quantitative data, perhaps indicating an equal importance placed on income generating activities. In some cases, respondents indicated in the in-depth interviews that the award money invested in their business and the income this generated both motivated and enabled them to avoid unsafe sex. This analysis provides some support that the cash transfers are not being used to counteract positive effects of the conditionality (in this case, avoiding unsafe sex), but rather are being used to cover everyday expenses, and when possible, to invest in farming and business.

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Table 1: Income, spending and wealth by gender at the 12-month follow-up visit

	Males Mean (SD)	Females Mean (SD)	p-value	Total Mean (SD)
Income in past 4 months	51.37 (138.32)	17.13 (48.98)	<0.001	34.55 (102.63)
Wealth*	33.07 (183.41)	6.85 (23.38)	<0.001	19.58 (123.82)
Spending in past 4 months	40.94 (105.26)	19.80 (50.37)	<0.001	30.28 (83.35)
Proportion of total income spent on (in past 4 mos):				
Business	11.2 (45.0)	8.9 (43.4)	0.206	10.3 (60.4)
Savings	2.7 (23.6)	1.4 (17.2)	0.138	1.8 (19.2)
Treatment/health	6.6 (26.2)	5.0 (41.8)	0.272	5.9 (38.0)
Eating out	2.1 (13.2)	0.6 (8.5)	<0.001	1.4 (11.3)
Alcohol/cigarettes	2.9 (14.8)	1.0 (9.8)	<0.001	2.9 (47.9)
Phone/airtime	6.1 (19.2)	5.1 (22.4)	0.232	5.5 (20.0)
Gifts	1.6 (9.4)	0 (0)	<0.001	0.9 (6.9)
School (self or children)	13.2 (85.5)	11.3 (72.9)	0.545	12.2 (79.4)
Farming equipment	8.4 (66.8)	5.8 (90.7)	0.413	7.1 (79.7)
Parents	9.0 (47.9)	3.7 (21.7)	<0.001	6.3 (37.1)
Economy Status (self-ranking ladder from 1-7)	2.6 (1.1)	2.5 (0.99)	<0.001	2.6 (1.0)

*Defined as savings that could be spent; **only 75 people reported currently owing on a loan, so debt is excluded from the table

Table 2: Reward perceptions and spending among those in the intervention arms, by gender

	Men (n=583)	Women (n=618)
Reward Motivating Behavior Change (scale 1-4, 1=very much)	1.48 (0.036)	1.48 (0.036)
Share reward with partner (scale 1-3, 1=all of it, 3=none)**	2.62 (0.025)	2.76 (0.020)
How Reward was spent		
Add to Savings	0.00 (0.04)	0.00 (0.07)
Invest in Farm Or Business	0.31 (0.47)	0.36 (0.47)
Pay for schooling**	0.05 (0.22)	0.00 (0.01)
Buy durable goods*	0.11 (0.31)	0.16 (0.36)
Buy Everyday goods	0.43 (0.50)	0.43 (0.50)
Treat self to entertainment	0.00 (0.08)	0.00 (0.00)
Transfer to family member	0.05 (0.23)	0.04 (0.20)
Other	0.03 (0.18)	0.02 (0.15)

*p<0.05; ** p<0.01

Table 3: Reward perceptions and spending among those in the intervention arms, by intervention arm

	High Value (n=512)	Low Value (n=503)
Reward Motivating Behavior Change (scale 1-4, 1=very much)**	1.36 (0.03)	1.59 (0.04)
Share reward with partner (scale 1-3, 1=all of it)**	2.69 (0.02)	2.69 (0.02)
How Reward was spent		
Add to Savings	0.006 (0.08)	0.00 (0.45)
Invest in Farm Or Business**	0.42 (0.49)	0.22 (0.42)
Pay for schooling	0.04 (0.18)	0.03 (0.16)
Buy durable goods	0.14 (0.35)	0.12 (0.33)
Buy Everyday goods**	0.32 (0.47)	0.53 (0.50)
Treat self to entertainment	0.0 (0.04)	0.04 (0.20)
Transfer to family member	0.04 (0.19)	0.04 (0.20)
Other	0.03 (0.17)	0.08 (0.28)

*p<0.05; ** p<0.01

Table 4. Spending themes and excerpts from in-depth interviews, by gender

Use of Reward	**Male**	**Female**
Home (dishes, clothes)	I: how will you spend the money you have gotten? R: I will buy my wife clothes and the rest of it I will buy food for my family I: what kind of changes do you expect [the money to bring]? R: I will buy clothes and my wife will put them on and other things	I: how has receiving the award today changed things in your life? R :it has helped me somehow because the money I received last time helped me in farming I: how will you spend the money you received today? R: I will buy clothes
Invest in existing business	I: how do talk about this amount of money? R: when I get this money I add it on my capital. This is because I am a tailor.Therefore, I add a capital of my business	
Invest/improve farm	I: what had you planned to do with this award? R: I will use it in my farm. I have cultivated one hectare and I will add 1 ½ hector.	I: do you think the amount of money you received when you put it together with what your husband got can change your life? R: it will change our life, we are planning to use it for farming and also to buy food for our children.
Purchase better or more food		I: do you think this award will bring changes in your life? R: yes. I will go to buy flour and eat it and I will also use it in my farm. When I get this money I do not need to do piece work. I will be busy in my farm.
Alcohol	I want to know about the cash award which you have received. How do people use this money? R: I do not know because everybody use it differently I: do you think people use this money wisely or badly? R: one of my friends use this amount to buy alcohol	

Table 5: Themes of outcomes of receiving the award from in-depth interviews, by gender

Outcomes of Reward	**Male**	**Female**
Motivates the return to the study		I: what are you planning to buy? R: I can decide to buy clothes or plates, cooking pot. Just something that can remind me about this study
Changed relationship dynamics	I: what will you do in order to receive award next time? R: I will continue doing the same; I will remain with one faithful partner or I will us condom. I: do you think still you will be at risk of getting infections? R: no I: do you think the cash award we provide motivate you to stay safe? R: yes, it helps me to stay safe, when I get money I go home and buy food for my family, clothes because if you don't buy these things for my wife she might think that I am not taking care of her. She can move around and this is when you will get problems.	I: Has the promise of cash award changed you from not having many sexual partners? R: it has changed me because if you can get your needs why should you go outside your marriage? If you cannot get your basic needs you go out looking for someone who can help you get them. For example, if I get money to buy food, flour why should I go for problems? Therefore, it has changed my life quite a lot.
Enabled reduction/avoidance of unsafe sex	I: do you think this study has been of great help to you to avoid infections? R: yes it has been of big help I have stopped doing unsafe sex because of this award. This is because when you are found with infections you will not get the award.	R :I have decided to stop unsafe sex because of this cash award. When I received award for the first time I started a small business of selling tomatoes in the market and I was getting a profit of 5000 shillings or 6000 shillings. Therefore, this is what enabled me to stop doing unsafe sex.