HHS Public Access

Author manuscript

Sociol Health Illn. Author manuscript; available in PMC 2016 July 01.

Published in final edited form as:

Sociol Health Illn. 2015 July ; 37(6): 904–919. doi:10.1111/1467-9566.12240.

"The problem here is that they want to solve everything with pills": Medication use and identity among Mainland Puerto Ricans

Wallis E. Adams[1], **Irina L. G. Todorova**[1], **Mariana T. Guzzardo**[1], and **Luis M. Falcon**[2]

[1]Northeastern University, Boston, USA

[2]University of Massachusetts Lowell, Lowell, USA

Abstract

Taking medications are complex symbolic acts, infused with diverse meanings regarding body and identity. This paper focuses on the meanings of medications for older Puerto Ricans living on the United States mainland, a population experiencing stark health disparities. We aim to gain an understanding of the way multiple cultural and personal meanings of medications are related to and integrated in identity, and to understand how they are situated within Puerto Rican culture, history and situation on the US mainland. Data is drawn from thirty qualitative interviews, transcribed and translated, with older Puerto Ricans living on mainland United States. Thematic Analysis indicated four prevalent themes: Embodiment of medication use; Medications redefining self through the fabric of daily life; Healthcare experience defined through medication; and Medicine dividing the island and the mainland. While identity is impacted by experience of chronic illness, the experience of medication prescription and consumption is further related to the construction of the sense of self in distinct ways. For these individuals, medication use captures the dilemma of immigration. While cultural belonging and well-being remains on the island of Puerto Rico, the mainland hosts both easier access to and excess reliance on medication.

Introduction

Medications are widely used in current health care to treat diagnosed disease, as well as to relieve pain, or to change one's mood or behavior. They also carry multiple meanings, which are diverse in social and family contexts, spaces, histories and traditions (Hodgetts et al. 2011; Viswanathan and Lambert 2005). The complex relationship people have with the medications and treatments they are prescribed become clearer if we delineate the complex social practices and meanings in which these behaviors are embedded (Mielewczyk and Willig 2007). The current paper explores the meanings of medications from the perspective of Puerto Rican adults with chronic illness in the mainland US, and situate these within the specific cultural, historic and migration context. While broadening our understanding of this specific population's experiences of illness and treatment, we approach the discussion of medication use through the lens of how they construct and reconstruct identity and self.

Address for correspondence: Wallis E. Adams, 333 INV, IUHRP, Northeastern University, 360 Huntington Ave, Boston, MA 02115. w.adams@northeastern.edu.

Meanings of medication and their impact on identity will be explored specifically within the context of Puerto Rican migration from the island to the mainland, and the tensions that arise from perceived differences in medical practices and well being between the two locations.

Moving Beyond Adherence: Meanings of Medication

Meanings of medications have often been studied in the context of understanding non-adherence to prescriptions, and sometimes with the aim of changing behavior in the direction of increased adherence (Antshel 2002). Clearly this is an important consideration, since the absence of consistency in medication adherence can have considerable consequences for the health and longevity (Scherman and Löwhagen 2004) of the patient and can impact the conditions of caregivers. At the same time, the framework of compliance has been critiqued and calls have been made for focusing on the patients and their 'insider' perspectives (Conrad 1985; Shoemaker et al. 2011) and developing collaborative and open provider-patient relationships (Scherman and Löwhagen 2004).

The meanings of medication have been somewhat explored in previous literature, both regarding specific disease states and with the aim of extracting common dimensions of "the medication experience" (Shoemaker et al. 2011). Research has also addressed the symbolic meanings of medication as produced in particular spaces, such as homes, and the impact on daily routine and social relations (Hodgetts et al. 2011; Dew et al. 2014). In their work on the sociality of medicines, Whyte, Van de Geest, and Hardon explore meanings and use of drugs in varied locations and cultural contexts (Whyte et al. 2002). The analysis of the social life of pharmaceuticals helps the authors shed light on complex social matters such as efficacy, control, commodification, identity, authority, legitimacy and skepticism (Whyte et al. 2002). More recent work on the meanings of medication explores moral discourses and governance (Dew in press).

Studies have illustrated that people's perceptions of medications, and whether they are likely to perceive them as beneficial or harmful, are associated with their self-reported cultural backgrounds (Horne et al. 2004). To that effect, many have stressed the importance of the contextual understandings of the symbolic meanings of medications, which can illustrate the logic of medication resistance or the alternative choices people make within local contexts (Pound et al. 2005; Scherman and Löwhagen 2004). Different ethnic groups can have specific cultural frameworks within which the construction of meaning, decision-making and practices around medication use are situated. In the process of migration, these meanings are continuously negotiated and both differentiated and integrated in the different local contexts.

Meanings of Medication among Latinos

While meanings and perceptions of medications for Latinos are addressed in the literature mostly through studies on medication adherence (Cersosimo and Musi 2011; Hosler and Melnik 2005; Ishisaka et al. 2012; Vlasnik et al. 2005), previous qualitative research gives some indications on the meaning of medications for Latino groups, including the perception of insulin for those with Type 2 diabetes (Davis et al., 2011; Hu et al. 2012), as well as

beliefs surrounding the use of antidepressants (Hansen and Cabassa 2012; Interian et al. 2007). Cultural beliefs such as *familismo* (importance placed on family) may influence the way in which Latinos, and Puerto Ricans specifically, give value or importance to medications (Interian et al. 2007; von Goeler et al. 2003). Interian et al. (2007) suggest that *familismo* can contribute to an ambivalent attitude about antidepressants. Furthermore, one study with Puerto Rican participants found that they tend to prioritize family issues and other life needs over managing their diabetes (von Goeler et al. 2003).

Beliefs related to religion, spirituality or alternative healing practices might also influence how medications are perceived (Antshel 2002; Davis et al. 2011). For example, some have proposed that fatalistic attitudes related to Latino culture combined with religious beliefs may affect the perception that medications are necessary, and contribute to the belief that chronic disease is determined by God and must be accepted and tolerated (Antshel 2002). There is evidence that cultural-religious background, independent of current religious practices and beliefs, impacts attitudes towards prescriptions and medication (Fainzang 2005).

Puerto Ricans on the Mainland

Puerto Ricans living on the United States mainland experience stark health disparities and have high rates of hypertension, arthritis, diabetes, and depressive symptoms (Tucker et al. 2010). In comparison to other Latino groups, Puerto Ricans often show worse health profiles (Acevedo-Garcia 2007). Simultaneously, mainland residing Puerto Ricans experience higher rates of poverty than most other Latino groups, with 25.6% living below the national poverty line (United States Census Bureau 2013). Furthermore, the historic and cultural circumstance of Puerto Rican adults on the mainland United States is unique. Puerto Ricans are US citizens and have the right to travel freely to and from the mainland, encouraging strong bidirectional ties to the island, and frequent movements from the island of Puerto Rico to the mainland and back (Duany 2011). These simultaneous connections to the US and PR lead to a distinctive context within which individuals develop meanings about health behaviors including medication use, and construct illness, social and cultural identities.

Methods

Participants

Data are drawn from the Boston Puerto Rican Health Study (BPRHS), an NIH-funded longitudinal cohort study of a total of 1500 participants which aims to understand the contribution of multiple biopsychosocial determinants of health disparities for this group (Tucker et al. 2010). The Internal Review Boards of Tufts Medical Center and Northeastern University have approved the study's protocol. The original 1500 participants were recruited using door-to-door enumeration and community approaches within randomly selected census blocks that were located in census tracks with at least 25 Puerto Rican adults between the ages of 45 and 75 years (Tucker et al. 2010). Eligibility included living within the Boston metropolitan area, Spanish or English language proficiency, 45–75 years of age, and self-identification as of Puerto Rican descent. Fifty participants from the longitudinal cohort study were randomly selected and asked to participate in further in-depth interviews. The

interviews aimed to understand participants' experiences around migration, illness and well-being, aging in the US, social support, acculturation, discrimination, and their comparisons between PR and the US. Individuals in this subsample were interviewed in their own homes through semi-structured interviews lasting 1 to 4 hours. The interviews were conducted in Spanish by bilingual research assistants and were later transcribed verbatim from the digital recording. Of the fifty interviews conducted, thirty were translated from Spanish into English. These thirty, from which we draw our findings, were chosen for translation based on heterogeneity in depressive symptomology and educational attainment. While the majority of analysis was conducted in English, two of the authors, both bilingual and bicultural, were able to refer to the original Spanish transcription and audio. All participants' names have been replaced with pseudonyms.

Analysis

The analysis of the transcripts was conducted using a Thematic Analysis approach (Braun and Clarke 2006) in order to identify and analyze patterns and themes in the qualitative data. The qualitative research software ATLAS.ti was used to support coding and theme development. Three of the authors completed initial coding of the 30 interviews. The initial coding captured multiple themes regarding experiences of health and illness, including participant's experiences of using the medications. Our further rereading and coding of the interviews focused on the way that the participants, through their use of language, constructed meanings and symbolism of medications, thus adding a discursive dimension to the thematic analysis. Such sequential analysis using different analytic lenses has been shown to add to the richness of the analysis. Simons and others for example, have made an argument for sequential use of thematic and narrative analysis (Simons et al. 2008). The authors met frequently to discuss the coding and interpretations based on the multiple readings of each interview, and the patterns being identified across interviews. In these meetings, themes were first identified, then reviewed, defined, and finalized through agreement among the coauthors (Braun and Clarke 2006).

Results

While the majority of our sample of older Puerto Ricans (n=30) has resided on the mainland US for many years, all were born in Puerto Rico, and most speak predominantly or exclusively Spanish (Table 1). The mean number of years that our participants have lived on the mainland is 37 years. Participants have a mean age of 59 years, with participants ranging in age from 49 to 75 years of age. The average educational attainment and income level indicates a population with socioeconomic disadvantage. The two most commonly cited reasons for their original migration are: looking for better work and life opportunities, and to be with family who had already relocated to the Mainland. However, access to health care is a primary motivation for remaining on the Mainland, with the vast majority of participants reporting that they are "very satisfied" or "satisfied" with health care they have received on the Mainland.

While conditions varied, most participants experience some degree of illness. Our sample is perhaps unique in the United States in that the majority of participants, despite their low

SES, report having health insurance (*n*=28). Puerto Ricans are US citizens, and those living on the mainland are eligible for government health programs and insurance. In Massachusetts, universal health coverage has been formally in existence since 2006. These situations of both poor health and high levels of insurance coverage are evident throughout the interviews and the following analysis. Participants had a high number of medical conditions, including hypertension, arthritis, depression, respiratory disease, diabetes, eye disease, and liver/ gall bladder disease. They also report using multiple medications, an average of eight medications, with one participant reporting taking up to 17 medications. These counts include both prescription medications and over the counter medications. One third or more of the participants report taking medications for hypertension (*n*=13), diabetes (*n*=10), respiratory disease (*n*=10), and depression (*n*=10). Other medical and demographic characteristics for the sample can be found in Table 1, below.

Participants discussed their use of, beliefs about, and attitudes towards medication in a variety of tones and contexts. Their discussions of medications formed four distinct yet interwoven themes about the meanings of medications and their relevance in identity construction. These include: Embodiment of medication use; Medications redefining self through the fabric of daily life; Healthcare experience defined through medication; Medicine dividing the island and the mainland. Each is explored separately below.

Embodiment of Medication Use

Medication was frequently discussed within the context of improved health and wellbeing. However, one's embodied experience of medication was complex and often negative for the individuals consuming it. Thus, many of the participants held both of these diametric constructions of pills as beneficial or injurious for the body simultaneously. The embodied experience of medication was related to their changing sense of who they are as body/self, often through a reference regarding perceptions of what is 'normal' and how they see themselves as moving away from that.

The benefits of medication are experienced physically for many of the participants. There is recognition that the pills, inhalers, injections, and pumps used to treat and prevent disease allows people to feel better than they otherwise would. Margarita (age 58) migrated to the US mainland four years ago in poor health, and was consistently complimentary throughout the interview towards the availability and quality of the medical care she's received since her arrival. She was similarly positive towards the prescription medication. Early in the interview she says, "I take my medication. So to this day I am… I feel good" (Margarita, age 58), and later in the interview repeats this sentiment. While Margarita cites general feelings of well-being with medication, it was more common for participants to note when medication had eased specific types and times of discomfort and thus returned one's sense of self to its 'normal' state. Francisco, for instance, discussed seeking treatment for an occurrence of neck pain: "So the doctor checked out everything and told me to take these pills, I took two and by nighttime I was back to normal" (Francisco, age 73).

Medication is also recognized as an important component of promoting and maintaining health, and combating disease. The use of pills, and other forms of medication, are used to define the severity of the illnesses that they or other people have and thus their subjective

perception of themselves as a sick person. Medication use also contributes to a definition that is different from, and in addition to, the identity shift that occurs as a result of an illness. Carmen reveals the difference in illness experience and disease in the following discussion. “Well my health is… Yes, it’s very poor… Poor, because I take my medicines like nine different types. My health is very poor but I feel good. Because I follow the medical instructions” (Carmen, 76). Her use of pills is related to her poor health, as well as to feeling good.

Individuals also presented pills and other types of treatments as harmful, rather than helpful, to the body, in a variety of ways and descriptions. Many mentioned the side effects of medications. Daniel attributes his frequent dizziness to his medication, and noted that he sometimes limits the number of pills he takes per day by referring to his embodied experience: “my body can’t put up with more” (Daniel, 59). Adherence to medication is compromised when side effects are impacting the quality of life of these medication consumers and their bodily experiences.

The unnaturalness of pharmaceutical medicine was frequently discussed. Within a holistic view of the body and self, Sebastián, 57, says that pills “end up harming other organs in your body” and goes on to show how they have changed his self, his way of “being”, and his normality:

> Sebastián: [Pills] are chemicals that are going into your body.
>
> Interviewer: So did you take the pills?
>
> Sebastián: I ended up taking the pills, I ended up taking them, but I didn’t… I took the pills, but I’m telling you, I didn’t like what the pills were doing to me, I didn’t want to be like that. I didn’t want to be like that, out of it [like in another world], I don’t know, I didn’t want to be that way, I wanted to [feel] normal, yes.

Participants frequently discussed taking medication despite the bodily harm that they believed was inherent in doing so. As Andrea puts it, “Here I have to be taking all this medication, which is something that also harms the body, so much medications, you know?” (Andrea, age 53)

Medications Redefining Self Through the Fabric of Daily Life

Prescriptions for, and consumption of, medication has broad impacts on participants, which extend beyond its effect on the treated disease. The impact on the thirty participants ranges from specific, such as the additional activity of taking daily pills, to broader symbolic ones. Most of the participants reported taking medication, and many shared that they are prescribed multiple medications; this had significant implications for the organization of their daily lives.

With multiple medications, their daily routines revolved around juggling their intake, often to the exclusion of other activities. Rosario (age 61) uses eleven different types of medication, including pumps, sprays, drops, and pills, while Carmen (age 75) has nine types of medicine. María, who takes twelve pills every morning and more later in the day, says, “All they talk to you about is pills, pills, pills, and that’s what’s harming my kidneys. And

sometimes I hold out with simple [problems] so that they won't give me so many pills" (María, age 67). The sheer volume of pills that María and others are prescribed and recommended discourages some from seeking further care, for fear of having to have more medicine.

> I'm taking 21 pills at a time. Do you think a person can work well that way? I doubt it. Now in the morning I take four, four hours later I take more, that way I don't take them all at once, and the ones that get finished up that don't have a refill I tell the doctor about, I throw them away.
>
> (Daniel, age 59)

Not only did the volume and routines of medication use impact participants' attitudes toward medicine, it also impacts other aspects of life simultaneously. Daniel's taxing new routine around medication consumption leads to concerns about his professional identity.

Participants note how they have made life changes to incorporate medications, and how medication consumption and preparation becomes part of the structure of their daily lives. When asked about her usual daily routine, Carmen (age 75) inserts descriptions of pill use within her narrative. Taking pills bookends her daily life, with her mornings beginning with milk, coffee, juice and pills, and her evenings ending with taking her pills and lying down. Another participant, Eugenia, says, "By taking the medications from the moment I drink my coffee in the morning, that's what [washes down] the medications so I can go on in my day" (Eugenia, age 56). For her, taking the medications is what allows her day to begin and be experienced.

While incorporated into the fabric of daily living, medication is simultaneously presented as representative of broad life changes and transitions, which are frequently negative. Temporal shifts in life, such as aging and retirement, are explained and defined through pills. Many of the people with chronic conditions interviewed made the point that the medication, along with the illness, will continue throughout the rest of their lives, thus disrupting identities. Dolores, for example, attributes the depression that she felt when starting insulin to realizing it would be a permanent and increasing presence for her. "I got to thinking that it was going to increase. And get worse… You know. When you [start] using insulin and once you use it you know that it's for life" (Dolores, age 60). Life before medication is constructed as a separate era for several of the participants than was their current experience. César reflects on these changes about his new arthritis diagnosis, "I'm taking medicine for it. Now I can't be thinking like I thought before. But I… I feel good. Good. But my medicine has to come first—for my pain. Do you understand? It's not the same" (César, age 53). In this new stage in César's life, medication, as well as the arthritis, takes on a new, dominant role, encouraging him to become a person who thinks differently about his activities and daily life.

For some of our interviewees, the taking of pills and medications had social meanings that framed medication taking as a moral duty or good, and thus the self is constructed as moral and responsible if adhering to the prescriptions. Margarita, the participant who defines health through the absence of medication, discusses why she always takes her medicine, "You have to make an effort… because the doctor is prescribing the medication,"

(Margarita, age 58). Margarita defers to the professional knowledge of doctors and status of medical professionals, underlining her role as a dutiful patient engaging in recommended health behaviors, including and represented by the consumption of medication.

Medication also plays a role in defining the virtuousness of social relationships and as a symbol of being loved and cared for in those relationships. When participants' family members or friends express concern and knowledge about the participant's medication, they are in this way signifying the strength of that relationship. Ana explains how her four children provide her support, "They tell me to go see the doctor. They tell me [what medicines] to take… the fact that they know what I am supposed to take" (Ana, age 51). To be a good family member or friend, one must be aware and engaged with the medication regimens of their loved ones. The receipt of others' care regarding medications is a symbol of being valued and loved. Medication, as symbol, defines not only health and self, but also ones relationship to the greater social world, which is further explored in the following section.

Healthcare Experience Defined Through Medication

The symbolic weight of medications is further seen in doctor patient relationships, and the way the participant sees him or herself as being defined in that relationship. One perspective, discussed in the previous theme emphasizes the specialized knowledge and status of medical professionals. Margarita's discussion above reflects this stance. This perspective implies that doctors should be listened to, and suggests that medications prescribed by doctors should be taken and refilled according to physician recommendation, supporting adherence. As Carmen says, "I don't have the attitude: 'They prescribed me [this] but I drank that other thing…' No! I follow doctors' instructions because they are the ones who studied, not me and I never let the medicines run out, I always go get them refilled" (Carmen, age 76).

While a few participants did display unwavering respect for physicians' knowledge, more commonly they expressed concern regarding the expertise of, and relationships with, their physicians, symbolized through the prescribing process. The manifestation of this concern for Rafaela, age 52, is through the following critique:

> I have inflammation on one side, that it swells, that I already have this side larger than this one, that you touch it and you notice it; uh, that I can't stand this side, that there are times that I can't put my hand here, because the pain terrible, the unpleasantness, that at times I cannot sleep on this side, and it is the manner in which I can sleep best, that at times I have to… you know? So I explain all this to her and… and it is like… all that she holds-on to is saying 'you have migraine' and gives me pills. Just now she is giving me some pills there that I am forgetting even my name, meaning I understand that the pills are causing me a terrible damage, uh, they had already given me other ones previously and I understand that they are not working, that they are not dealing with what I have, rather they are giving me pills for what they believe, and what they believe is not what I feel I have
>
> (Rafaela).

Rafaela experiences her doctor as ignoring both her illness and her medication experience.

The critique that physicians' don't listen to or understand patients' medication experience, and thus do not see them as individuals, extends beyond specific clinicians. Doctors, as a profession, are perceived as relying solely on medication to solve all ills, and also as pushing an excess quantity of medication on patients. Daniel criticizes, "Each doctor you see gives you pills, the next doctor gives you more, and when you see another he takes the first ones away and switches them for another type; well today it came out on television that there's a type of medicine that was being given out in CVS that they didn't know how to prepare it right and it was killing people." By immediately following his observation that all doctors prescribe medication with a fatal pharmaceutical anecdote, Daniel links medication and fatality through his critique of over-prescription.

The sense that doctors use pills as the sole solution for mental and physical illness, without listening to the participant or developing a relationship with them, is routinely criticized. This generalized critique of doctors and medication is representative of the perceived failures of broader biomedical philosophies. Manuel eloquently presents and rejects this Western reliance on prescription medication below.

> The problem here is that they want to solve everything with pills. I don't like that. You go and they give you a ton of pills, they want to solve everything with pills and pills. And sometimes problems, I don't know, but I don't think they resolve themselves that way. I'm aware that it's important to give pills, but they fill you with so many pills that you end up worse, more sick.
>
> (Manuel, age 51)

There is certainly a broad recognition of the utility and benefit of medications among these participants. However, there is also a broad rejection of prescribing a pill for every ill. In this way, pills embody broader concerns about lack of personal care and individual attention within health care. As medication is seen as representative of this simplistic and mechanistic response to illness, participants frequently try to avoid new or renewed prescriptions for both physical illnesses and mental health concerns.

Medicine Dividing the Island and the Mainland

Many of the meanings of medications are geographically and culturally located on either the island or the mainland. Manuel, above, geographically locates his critique as the mainland United States when he says, "The problem here is that they want to solve everything with pills." Medical care on the mainland is associated with a purely pharmaceutical driven approach to all problems, whereas overmedication is implicitly rejected on the island of Puerto Rico. However, discussions of health care and medicine in Puerto Rico reveal other concerns.

The affordability and accessibility of medical care and medication on the mainland is frequently juxtaposed with the island. More than one participant said that the reason that they originally moved to the mainland was due to illness of oneself or a family member, and the comparable ease of care. After saying that she moved to Boston "for medical reasons," Rafaela added, "The neurologist himself told me to come this way" (Rafaela, age 53). The

affordability of health care related services and commodities were mentioned with great frequency when discussing the reasons for being located on the mainland.

Medications were used to represent the contrast in general health care cost between the two locations. According to Diana,

> It's also hard for [older people in PR] because of the economic situation that exists in Puerto Rico. It's not like here there. It's… a little developed almost like here but… also it's difficult because because of… the medicines are more expensive and… I don't know. I think it gets a little harder for medical things
>
> (Diana, age 49).

While in this quote Diana states that medications are more expensive on the island, it is also pertinent that she previously admitted not taking a prescribed medication because she "didn't want to be in the state of having to take medicine", thus embodying the conflicting tensions surrounding medication use.

Several others repeated the concern of the high price of medication in Puerto Rico, and some also volunteered the cost that they pay in the mainland for prescriptions for comparison. With the price of prescription pills reflective of medical treatment as a whole, the complicated pros and cons of each location are presented.

Despite the common juxtaposition between the island and the mainland in terms of affordability of medication, there are also narratives about economic challenges on the mainland, as well, that are related to insurance and medicine. "Before they would give you your prescriptions for free with Medicare, now [they don't do that anymore], now I have to pay. Just this month I had to get new glasses and I won't be able to because I don't have enough money for… And we have to pay for part of the medicines also, and I don't have enough to cover… food, the bills, and the rent" (María, age 68). The price of medicine, and health related goods such as glasses, are interwoven in experiences of economic instability and vulnerability.

However, the majority of the participants believe that a primary benefit of living on the mainland is better and more affordable access to medical treatments for themselves and their loved ones. Insurance coverage of prescription medication is the topic of much discussion in understanding the distinctions and tensions between the mainland and the island, and is why many participants remain in the mainland. Lucía explains why her neighbors are going back to Puerto Rico: "They are leaving because they denied them disability and they don't have insurance, so they are leaving" (Lucía, age 66). Insurance, and the medicine that it allows people to purchase, is a deciding factor upon which location of residence resides.

Lucía expressed a desire to move back to Puerto Rico, which was a common theme throughout the interviews. However, she is the primary caretaker of her 7-year-old grandson, who has autism. In order to afford the medications and treatments that he needs (and that she needs in order to maintain her health to caretake for him) they remain on the mainland. Others echo this, indicating that they are unhappily rooted on the mainland by low cost medication. "I'm crazy for going back, but because I suffer heart problems, [my heart] was

operated on, so my wife does not want to, because the medicines are bad, [she says] about here and there" (Daniel, age 60). While Daniel, and many of the interviewees, spoke longingly of returning to Puerto Rico, he also issued a cautionary tale of those who do return to the island: "Then they get sick and don't have a cent to buy the medicines".

Medication on the mainland is therefore framed in narratives of both access and excess. While rejecting the excessive reliance on medication present in mainland biomedicine, many are simultaneously grateful for the increased access to medication that they are able to enjoy. Furthermore, medication incorporates meanings both harmful and helpful. Andrea, who, at age 53, has lived in her current neighborhood in the Northeastern United States for the past 32 years, reflects on these conflicts. She mentions that medications are "cheaper" and the medical science is more advanced on the mainland. A chronic asthma sufferer, she says, "I go to Puerto Rico and I don't have any asthma. Yes, I get a little bit out of breath, but I don't have to use a machine or anything like that, my bones ache a little but not too much, I got sick here with asthma" (Andrea, age 53). While the medications are cheaper on the mainland, the symptoms are worse. Rosario's experience of chronic arthritis echoes this tension:

> Up to this date I have remained here, I have withstood because of the treatment of doctors and medicines that I have. But if not I would have already gone to Puerto Rico because the cold attacks too much the arthritis I have
>
> (Rosario, age 61).

Some participants feel the cold weather in the U.S. can be detrimental to their well-being in many ways, either affecting their physical and mental health or hindering their ability to engage with others (Todorova et al., 2014). Simultaneously, they perceive that they need access to the United States mainland health care system to address their health problems. Thus, this presents a medical geographic conundrum: life on the mainland negatively influences well-being, but the medications they need to address their health problems can only be obtained by remaining on the mainland.

Discussion

In this paper we have delineated meanings of medications, which have been prescribed for the treatment of multiple chronic conditions, for a group of Puerto Rican adults living in the US mainland. We aim to gain understanding into the patients' perspectives of medications within broader sociocultural context, and thus this study uses a qualitative approach with in-depth interviews and close analysis and interpretation (Lawton 2003; Stephens and Breheny 2013).

Illness can be understood as an integrated experience of the body, self and social identity. When diagnosed with an illness, particularly one which is chronic, people can experience embodied changes, a "biographical disruption" (Bury 1982) and a change or disorientation in their sense of self (Charmaz 1983; Lawton 2003). Extensive research from the social and psychological fields has delineated the paths to adaptation to chronic illness, the negotiation of the changing self and reconstruction of valued identities, through narrative processes (Hydén 1995; Williams 1984). While diagnosis and experience of illness frequently creates

a disruption of self, not all patients experience a threat to one's identity (Hubbard 2010). Furthermore, resources and treatment can protect identity and renegotiate previous loss of self (MacRae 2010; Tilden 2005). The incorporation of medicine use in self and identity has important implications for this stream of research.

The medication use described by these individuals is greater than that of other groups on the mainland United States. According to the Sloan Institute (2005), 14% of U.S. adults report taking medication for hypertension, 4% report taking medication for diabetes, and 2.9% report taking medication for depression. This is in stark contrast to the amount of medication for these chronic conditions reported by these older Puerto Ricans. As reported above, 43.3% of these respondents (n=30) report taking medication for hypertension, 33.3% report taking medication for diabetes, and 33% report taking medication for depression. However, the number of adults aged 45 years and older with two or more chronic conditions increased across all racial and ethnic groups in the United States between 2000 and 2010 (Freid et al. 2012). The increasing commonality of chronic illnesses and the medications associated with their management among older adults makes issues of identity and medication broadly relevant.

Consuming medications are complex symbolic acts, which have physiological, symptomatic and mood consequences, and are infused with diverse meanings regarding body, self and identity. The space occupied by the medications that people are prescribed for these chronic illnesses, in the negotiation of the embodied self and social identities, is less often explored, although there are some examples (Adams et al. 1997; Hodgetts et al. 2011; Scherman and Löwhagen 2004; Viswanathan and Lambert 2005). Several studies have addressed the association between illness perceptions and medication adherence (Kucukarslan 2012). Illness identity or 'the label people place on their health threat', was found to be associated with medication adherence in some health conditions with evident symptoms (Kucukarslan 2012). Medications themselves and people's practices of medication use are related to the way they construct identities in the process of living with and adapting to chronic illness, in addition to the impact of the illness experience. This can be seen through the embodied, lifestyle, and symbolic meanings that these individuals constructed regarding their medication.

Medications, while prescribed to treat disease, can become the concrete material symbols of this disease and how it is associated with the person's self-concept. The act of consuming medications confirms the existence and defines the severity of the illness, and thus the need to internalize an illness identity through "identity work" (Adams et al. 1997). The illness leads to changes in the way one experiences and relates to one's body, and the medicine draws further attention to embodied changes by either reducing symptoms or by causing additional changes through their side effects. The body/self is thus transformed and a renegotiation of one's embodied identity is an on-going part of dealing with illness and medication use (Scherman and Löwhagen 2004). Rejecting medications can be symbolic of a refusal to accept the identity of a sick person and the potential stigma associated with the illness identity (Adams et al. 1997).

If illness is a 'biographical disruption'(Bury 1982), medications can be experienced as 'restoring' the self when they eliminate the symptoms associated with the illness related changes. The sense of control and predictability that the daily patterns of consuming medications offers, also contributes to the construction of a continuity in the sense of self (Hodgetts et al. 2011). For others in our study, medications were associated with damaging or losing the past self, particularly if they added further embodied side effects. People can feel as if they are not being themselves when taking medications, as seen in asthma sufferers (Scherman and Löwhagen 2004). In long term chronic illness, as was evident for our participants, medications are frequently prescribed for indefinite periods of time and therefore come to symbolize a past valued self that is now irreversibly lost. Thus medications symbolize life transitions, such as aging.

Medications also led to changes in one's day-to-day routine and capacities, which is also related to how people define who they are. Explorations of the emplacement of medications in space, specifically homes, illustrate how they become 'mundane objects' that are nonetheless central to constructing daily routines, as well as identities within those routines (Hodgetts et al. 2011). Additionally, in the daily fabric of life, medications became part of one's social relationships and, for many of our participants, are indicative of the closeness of these relationships. In the routines of managing the disease, the way in which others remembered, asked and supported the participants in their medication regimens became symbolic of their love and care.

Medications were also relevant to interactions with health care professionals. Many placed all medical authority firmly in the hands of physicians, and thus the physicians determine choice and behavior regarding medicine. In that respect, as identified by others (Lumme-Sandt et al. 2000), some of our participants also considered it their moral obligation to be consistent in their medication use. For this group of Puerto Ricans, the moral obligations that some feel in taking their medications, and respecting the status of doctors, is in part connected to ideas of using valuable health benefits accessible through US citizenship.

On the other hand, healthcare providers were perceived as failing to relate to them as individuals, as evidenced through their overreliance on prescribing. As a result these adults felt voiceless and depersonalized in these interactions, which were driven by providing prescriptions and instructions. In a sense, this also represented a loss of self in the moments of these interactions. Many scholars discuss the Latino cultural value termed *personalismo* (personal connection or personal relationship), which emphasizes a trusting, intimate relationship with service providers (Antshel 2002; Juckett 2013). Specific examples of *personalismo* between service providers and patients can include longer visits that entail conversations about patient's family and personal stories, as well as socially appropriate physical contact (Antshel 2002). While it is considered a cultural value across different Latino subgroups, there are few studies with only Puerto Rican samples that discuss *personalismo* (Comas-Díaz 1984). Even though the Puerto Ricans in our study value the quality of the health care system in the US, they also perceive some inadequacies in their treatment, particularly as it relates to their physicians relying excessively on prescribing medications for their patients' conditions. While the high number of medical conditions experienced by these mainland Puerto Ricans impact the number of medications prescribed,

this lack of *personalismo* in doctor-patient interactions may result in provider's overreliance on medication as treatment, adding to the volume of medications.

Dew et al. (in press) identified four repertoires of moral evaluation of pharmaceuticals in a New Zealand based study: disordering society repertoire, disordering self-repertoire, disordering substances repertoire, and a re-ordering substances repertoire. Despite the differences in location and methodology, our findings echo these findings, in that individuals articulate a wide diversity of meaning regarding pharmaceutical-related identity and morality.

For immigrants, and specifically Puerto Ricans who have moved to the US mainland, medications carry additional meanings in the context of their split between the island and the mainland. While concerned over what they saw as reliance on pharmaceuticals in the US, and the related absence of interest in them as a person, participants also experienced the benefits of medical and pharmaceutical treatment. Some of them preferred to stay in the US independent of the medical treatment they needed, while for others medical treatment was the main motivation for remaining on the mainland. As such, it held them back from what for many was a constant longing to return to the island of Puerto Rico, particularly in older age (Todorova et al 2014). Thus medications come to be associated not only with one's illness history, but one's immigration history and belonging to place and country.

By moving to the US to obtain what they perceive as superior health care and better access to medications they are addressing basic healthcare needs that are simultaneously inconsistent to constructs of Puerto Rican cultural identity (such as *personalismo*, interdependence, and home remedies). Therefore, valuable ideas about health and relationships may be minimized or subverted in order to address basic health care needs. Medicating in the US means one is addressing one's health care needs, but it also means one is being overmedicated, relying too much on something perceived as unnatural, and diminishing the doctor-patient interaction.

The macro-level context that includes Puerto Rico's political status and historical relationship with the US adds layers of meaning to their perspectives. The political status of PR is described as dependent on the US. Historically, the relationship between the US and PR has been patriarchal in many ways (Sullivan 2007). This more macro-level status of dependency influences micro-level ideas that Puerto Ricans need the US, and could not survive on their own. This is partly manifested through the interest in moving to the US for health care reasons, and needing to stay there into old age, despite a desire, for many, to return to the Island. The macro level relationship of dependency between Puerto Rico and the mainland is echoed in individual experiences of health care interactions and health care motivated decision-making.

The narratives that entail a desire to return to the Island all suggest that returning would enhance their well-being in many ways, such as being able to age surrounded by family and in a familiar, warm climate (Todorova et al 2014). While living in the US may positively influence health, it might simultaneously negatively influence their well-being or what they consider valuable in life. Thus exists this tension: being able to afford medication on the

mainland yet longing for the island and its cultural environs. This study does not speak to those individuals who return to the Island, privileging a sense of well being over access to medication. Further work in this area could elucidate various responses to this tension.

Medication in this situation becomes the symbol and representation of medical care in general, and occasionally broader structural attributes of the mainland, including transportation and housing. From this tension arises a degree of cognitive dissonance that entails subverting or minimizing cultural values so that one can obtain needed medications. In choosing access to pills, and thus a moderate improvement in societal services, many of these adults are unable to fulfill their desired return to their familial and cultural homeland, forsaking warm social contacts and full integration with a preferred cultural identity.

Conclusion

Medications can have broad impact on people's lives, which goes far beyond managing the disease and its symptoms. They act as tangible symbols of the disease and thus solidify the existence of the disease and the many changes that accompany it in one's daily life, self, relationships and visions for the future. Medications can both support the (re)construction of preferred or 'normalized' identities, or more often, they can symbolize undesired changes in one's personal and social identities. Infused with so much symbolic meaning, there can be many reasons why people can resist medication use. In this sense, people's decisions regarding medication use can be made sense of when considering the situations and symbolic meanings that they have acquired. Cultural and immigration context is an integral component in the construction of identities and meanings surrounding medication use and chronic illness.

Acknowledgments

This study was funded by the National Institute on Aging (P01 AG023394) and the National Heart, Lung, and Blood Institute (P50 HL105185) of the National Institutes of Health. The assistance of the community members who participated in the study is gratefully acknowledged. This paper benefited from thoughtful comments and critiques from the reviewers, as well as participants at the British Sociological Association Annual Conference and Eastern Sociological Society Annual Meeting.

References

Acevedo-Garcia, DaB; LM. Latino Health Paradoxes: Empirical evidence, explananations, future research and implications. In: Rodriguez, H.; Soenz, R.; Menjivar, C., editors. Latino/as in the United States: Changing the face of America. New York: Springer; 2007. p. 101-113.

Adams S, Pill R, Jones A. Medication, chronic illness and identity: The perspective of people with asthma. Social Science and Medicine. 1997; 45(2):189–201. [PubMed: 9225407]

Antshel KM. Integrating culture as a means of improving treatment adherence in the Latino population. Psychology, Health and Medicine. 2002; 7(4):435–449.

Braun V, Clarke V. Using thematic analysis in psychology. Qualitative research in psychology. 2006; 3:77–101.

Bury M. Chronic illness as biographical disruption. Sociology of Health and Illness. 1982; 4(2):167–182. [PubMed: 10260456]

Cersosimo E, Musi N. Improving treatment in Hispanic/Latino patients. The American Journal of Medicine. 2011; 124(10 Suppl):S16–21. [PubMed: 21939794]

Charmaz K. Loss of self: A fundamental form of suffering in the chronically ill. Sociology of Health and Illness. 1983; 5(2):168–195. [PubMed: 10261981]

Comas-Díaz L. Content themes in group treatment with Puerto Rican women. Social Work with Groups: A Journal of Community and Clinical Practice. 1984; 7:75–84.

Conrad P. The meaning of medications: another look at compliance. Social Science and Medicine (1982). 1985; 20(1):29–37. [PubMed: 3975668]

Davis RE, Peterson KE, Rothschild SK, Resnicow K. Pushing the envelope for cultural appropriateness: does evidence support cultural tailoring in type 2 diabetes interventions for Mexican American adults? Diabetes Educator. 2011; 37(2):227–38. [PubMed: 21343599]

Dew K, Norris P, Gabe J, Chamerlain K, Hodgetts D. Moral discources and pharmaceuticalised governance in households. Social Science and Medicine. In press. 10.1016/j.socscimed.2014.03.006

Dew K, Chamberlain K, Hodgetts D, Norris P, Radley A, Gabe J. Home as a hybrid centre of medication practice. Sociology of Health and Illness. 2014; 36(1):28–43. [PubMed: 23909467]

Duany, J. Blurred Borders: Transnational Migration between the Hispanic Caribbean and the United States. Chapel Hill: University of North Carolina; 2011.

Fainzang S. Religions attitudes towards prescriptions, medicines and doctors in France. Culture, Medicine and Psychiatry. 2005; 29:457–476.

Freid, VM.; Berstein, AB.; Bush, MA. NCHS Data Brief, no 100. Hyattsville: MD: National Center for Health Statistics; 2012. Multiple chronic conditions among adults aged 45 and over: Trends over the past 10 years.

Hansen MC, Cabassa LJ. Pathways to depression care: help-seeking experiences of low-income Latinos with diabetes and depression. Journal of Immigrant and Minority Health. 2012; 14(6):1097–106. [PubMed: 22367667]

Hodgetts D, Chamberlain K, Gabe J, Dew K, Radley A, Madden H, Norris P, Waimarie Nikora L. Emplacement and everyday use of medications in domestic dwellings. Health and Place. 2011; 17(1):353–360. [PubMed: 21163684]

Holm S. What is wrong with compliance? Journal Of Medical Ethics. 1993; 19(2):108–110. [PubMed: 8331634]

Horne R, Graupner L, Frost S, Weinman J, Wright SM, Hankins M. Medicine in a multi-cultural society: the effect of cultural background on beliefs about medications. Social Science and Medicine (1982). 2004; 59(6):1307–1313. [PubMed: 15210101]

Hosler AS, Melnik TA. Population-based assessment of diabetes care and self-management among Puerto Rican adults in New York City. Diabetes Educator. 2005; 31(3):418–26. [PubMed: 15919642]

Hu J, Amirehsani KA, Wallace DC, Letvak S. The meaning of insulin to Hispanic immigrants with type 2 diabetes and their families. Diabetes Educator. 2012; 38(2):263–70. [PubMed: 22357711]

Hubbard G, Kidd Lisa, Kearney Nora. Disrupted Lives and Threats to Identity: The Experiences of People with Colorectal Cancer Within the First Year Following Diagnosis. Health. 2010; 12(2):131–146. [PubMed: 20164162]

Hydén L-C. In search of an ending: Narrative reconstruction as a moral quest. Journal of Narrative and Life History. 1995; 5(1):67–84.

Interian A, Martinez IE, Guarnaccia PJ, Vega WA, Escobar JI. A qualitative analysis of the perception of stigma among Latinos receiving antidepressants. Psychiatric Services. 2007; 58(12):1591–4. [PubMed: 18048562]

Ishisaka DY, Jukes T, Romanelli RJ, Wong KS, Schiro TA. Disparities in adherence to and persistence with antihypertensive regimens: an exploratory analysis from a community-based provider network. Journal of the American Society of Hypertension. 2012; 6(3):201–9. [PubMed: 22520931]

Juckett G. Caring for Latino Patients. American Family Physician. 2013; 87(1):48–54. [PubMed: 23317025]

Kucukarslan SN. A review of published studies of patients' illness perceptions and medication adherence: Lessons learned and future directions. Research in Social and Administrative Pharmacy. 2012; 8(5):371–382. [PubMed: 22986176]

Lawton J. Lay experiences of health and illness: Past research and future agendas. Sociology of Health and Illness. 2003; 25(3):23–40. [PubMed: 14498928]

Lumme-Sandt K, Hervonen A, Jylhä M. Interpretative repertoires of medication among the oldest-old. Social Science and Medicine (1982). 2000; 50(12):1843–1850. [PubMed: 10798336]

MacRae H. Managing Identity While Living WIth Alzheimer's Disease. Qualitative Health Research. 2010; 20(3):392–305.

Mielewczyk F, Willig C. Old clothes and an older look: The case for a radical makeover in health behaviour research. Theory and Psychology. 2007; 17(6):811–837.

Pound P, Britten N, Morgan M, Yardley L, Pope C, Daker-White G, Campbell R. Resisting medicines: a synthesis of qualitative studies of medicine taking. Social Science and Medicine. 2005; 61(1): 133–155. [PubMed: 15847968]

Scherman MH, Löwhagen O. Drug compliance and identity: reasons for non-compliance. Experiences of medication from persons with asthma/allergy. Patient Education And Counseling. 2004; 54(1): 3–9. [PubMed: 15210253]

Shoemaker SJ, Ramalho de Oliveira D, Alves M, Ekstrand M. The medication experience: preliminary evidence of its value for patient education and counseling on chronic medications. Patient Education And Counseling. 2011; 83(3):443–450. [PubMed: 21435815]

Simons L, Lathlean J, Squire C. Shifting the focus: Sequential methods of analysis with qualitative data. Qualitative Health Research. 2008; 18:120–132. [PubMed: 18174540]

Sloane Epidemiology Center at Boston University. Patterns of Medication Use in the United States 2005: A Report from the Slone Survey. 2006. Available at http://www.bu.edu/slone/files/2012/11/SloneSurveyReport2005.pdf

Stephens C, Breheny M. Narrative analysis in psychological research: An integrated approach to interpreting stories. Qualitative research in psychology. 2013; 10(1):14–27.

Sullivan, STN. Race and Epistemologies of Ignorance. New York: SUNY; 2007.

Tilden B, Charman Denise, Sharples Jenny, Fosbury Jack. Identity and Adherence in a Diabetes Patient: Transformations in Psychotherapy. Qualitative Health Research. 2005; 15(3):312–324. [PubMed: 15761102]

Todorova ILG, Guzzardo MT, Adams WE, Falcon LM. Gratitude and longing: Meanings of health and aging for Puerto Rican adults in the mainland. Journal of Helath Psychology. 2014 Feb 3.10.1177/1359105313519155

Tucker KL, Mattei J, Noel SE, Collado BM, Mendez J, Nelson J, Griffith J, Ordovas JM, Falcón LM. The Boston Puerto Rican Health Study, a longitudinal cohort study on health disparities in Puerto Rican adults: Challenges and opportunities. BMC Public Health. 2010; 10:107–107. [PubMed: 20193082]

Briefs, ACS., editor. United States Census Bureau. Poverty rates for selected detailed race and Hispanice groups by State and place: 2007–2011. 2013.

Viswanathan H, Lambert BL. An inquiry into medication meanings, illness, medication use, and the transformative potential of chronic illness among African Americans with hypertension. Research in Social and Administrative Pharmacy. 2005; 1(1):21–39. [PubMed: 17138464]

Vlasnik JJ, Aliotta SL, DeLor B. Medication adherence: factors influencing compliance with prescribed medication plans. Case Manager. 2005; 16(2):47–51. [PubMed: 15818344]

von Goeler DS, Rosal MC, Ockene JK, Scavron J, De Torrijos F. Self-management of type 2 diabetes: a survey of low-income urban Puerto Ricans. Diabetes Educator. 2003; 29(4):663–72. [PubMed: 13677177]

Whyte, SR.; Geest, SVD.; Hardon, A. Social Lives of Medicine. Cambridge, UK: Cambridge University Press; 2002.

Williams G. The genesis of chronic illness: Narrative re-construction. Sociology of Health and Illness. 1984; 6(2):175–200. [PubMed: 10268832]

Table 1

Sample Characteristics (n=30)

Demographic Characteristics		Health and Health Care Characteristics	
Age		Health status (self report)	
Mean age	59 years	Excellent	0
Age range	49–75	Good/ Very Good	7 (23%)
		Poor/ Fair	23 (77%)
Gender		Medical conditions	
Female	20 (67%)	Mean number of diagnoses	3.5 Dx
Male	10 (33%)	Number of Respondents with:	
		Hypertension	18
Mean time lived on the mainland	37 years	Arthritis	17
		Depression	16
		Anxiety	15
		Respiratory disease	13
Languages spoken[1]		Diabetes	11
Spanish only	50%	Eye disease	8
Mainly Spanish	32%	Liver/ Gall bladder disease	7
Spanish/English equally	18%		
Education		Health Insurance	
Less than High School	23 (77%)	No coverage	2 (7%)
High School graduate	7 (23%)	Medicare coverage[1]	77%
		MassHealth coverage[1]	83%
Income below or equal to poverty threshold[2]	14 (47%)		

[1] Missing data

[2] Poverty threshold based on U.S. Department of Health and Human Services guidelines