

1 An Innovative Teen-Centered Antenatal Care Model Compared 2 to Standard Antenatal Care in Jamaica

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6

7 **Abstract**

8 The purpose of this study was to explore the perceptions of pregnant adolescent mothers
9 visiting two antenatal clinics in Jamaica. Findings of focus group interviews held at a
10 standard clinic and a teen-centered clinic were compared in terms of feelings and experiences,
11 coping strategies, strengths, hopes and challenges faced, desires and needs or future plans, as
12 well as perceptions of the community and healthcare provided. The teens described feelings of
13 disappointment, sadness, betrayal, persecution, as well as renewed maternal support, strength
14 and determination to complete school. The significance of maternal support to female
15 adolescent mental health and resilience demonstrated in this study supports previous
16 international research. A ?Psycho-Social Determinants of Maternal Adolescent Health Model?
17 is introduced that provided guidance for the thematic analysis of study findings. Innovation in
18 the infrastructure of the teen-centered clinic, expansion of the roles and philosophy of the
19 staff, as well as a structured group prenatal care delivery model are all innovations that may
20 support the Jamaican maternity care system in achieving the Post-2015 Universal World
21 Health Organization Goals for health.

22

23 *Index terms—*

24 **1 Introduction**

25 This study examined the perceptions of pregnant adolescents visiting Jamaican antenatal clinics. The researchers
26 were concerned with adolescent pregnancy, its high incidence, and its relationship to psychological distress and
27 school drop-out. Finally we explored adolescent maternity care as an indicator of gaps that could be targeted
28 for future priority programming in the maternal newborn healthcare system. This paper will focus on the
29 perceptions of the focus group participants that are concerned with the healthcare provided within the context
30 of the Jamaican healthcare system.

31 Jamaican policy makers within the healthcare, educational and social care have enacted programs that
32 synergistically have addressed teen pregnancy. Once one of the highest in the Caribbean, the adolescent
33 pregnancy rate (ages 15-19 years) decreased from 137 in 1975 to 72 in 2008 (Serbanescu 2010). After the
34 policy, "Re-Integration of Adolescent Mothers into the Formal Education system", was implemented, teens
35 were permitted to return to their secondary school of choice following the birth of their newborn (Williamson,
36 2013). Jamaica's strategic plan (Planning Institute of Jamaica, 2009) emphasizes prevention of pregnancy and
37 support of adolescent mothers in to the Post-Millennium Development Goals (MDG) era since, teen pregnancy
38 contributes to a significant percentage of the Jamaican mothers who access prenatal care late, experience preterm
39 birth and other life-threatening obstetrical complications (Serbanescu 2010).

40 Jamaican has a two-tiered healthcare system. The greatest population demand and the bulk of healthcare
41 dollars are spent in the public sector with a small portion invested by private corporations for insured or self-
42 pay patients ??PIOJ 2009). For many years, publicly funded maternity care has been delivered in the standard

3 RESULTS

43 format, ubiquitous to many developing countries. Limited financial resources have restricted the amount of facility
44 space, human resources and infrastructure that can be provided by the public healthcare system. Consequently
45 antenatal clinics (other than the Victoria Jubilee Hospital) can only be provided once per week at A and B
46 level (level I and II) hospitals in large urban centers, while the 8 outlying Centers of Excellence (public health
47 clinics) and rural satellite clinics provide women's health services and maternity care one to three times per week
48 depending upon the demand and location. The Victoria Jubilee Hospital began a pilot project in 2009 to provide
49 care to pregnant adolescent mothers in a separate waiting room in which prenatal teaching could be tailored to
50 their developmental and learning needs. Shorter lines, a nutritious drink and air conditioning were some of the
51 conveniences provided to support an environment that was more conducive to learning. Typically, on Antenatal
52 Clinic days, adult patients continued to wait in long lines or in a crowded waiting room for 1-5 hours with similar
53 types of antenatal teaching. However an attempt was made to make the wait for the adolescents more productive.
54 The results were never fully evaluated. Despite the positive anecdotal feedback received, one of the goals of this
55 study was to compare and contrast the perceptions of healthcare delivery for the two models and to provide an
56 informal evaluation of the teen-centered care. Thematic analysis of the focus group findings was informed by a
57 model developed by one of the authors ??Stevens, R). In this framework entitled, "Psycho-Social Determinants
58 of Maternal Adolescent Health". The model hypothesizes that the main determinants of teen health are degree of
59 isolation from family, community and society. There are five domains: 1. Integration into family & autonomy, 2.
60 Integration into community & culture, agency and acceptance, 3. Integration into culture & level of Self Esteem,
61 4. Life Skills, critical thinking, negotiation, financial competency, resilience and 5. Economic Power, education,
62 job skills (See Figure ??). Culture within families, communities and society is a driving force. The implication is
63 that minimizing isolation is the strongest, most effective measure to promote health. Additionally, strengthening
64 the teen's "sense of belonging" becomes the centralizing priority in care delivery. The paper will conclude with
65 implications and applications of the model.

66 2 II. Resources & Techniques (Methods)

67 Convenience sampling methods were used to recruit adolescent girls, ages 12-17 years old who visited the antenatal
68 clinics at two urban hospitals in Jamaica. As mentioned, one hospital provided a "Teen Pregnancy Clinic" while
69 the other delivered care in a standard antenatal clinic in which both adolescents and adults waited together for
70 appointments. Two trained research assistants verbally solicited the teens who attended clinic. Only adolescents
71 who were free of learning disability and were able to speak, read and write English were included in the study.
72 The researchers complied with Jamaican age of consent policies requiring child assents and parental consents for
73 participants who were 15 years old and under.

74 Although the initial goal was to include at least 16 mothers, the focus group sample consisted of 13 pregnant
75 adolescents, seven from the standard antenatal clinic and six from the Teen Pregnancy clinic. Two of those who
76 participated in the focus groups had previously participated in the individual interviews. The analysis of the 30
77 individual interviews are published elsewhere (Wilson-Mitchell, Bennett& Stennett 2014). The composition and
78 demographics of the focus groups can be found in Table 1. The focus group discussion were conducted in a private
79 space at both hospitals either prior to or following scheduled prenatal appointments. In an effort to provide the
80 participants with useful compensation, refreshments were provided as well as department store and supermarket
81 coupons worth \$1000 JAD (approx. \$10 USD). They were encouraged to purchase supplies for their babies. The
82 researchers prepared and facilitated the focus group using the guidelines of Kruger (1997) and Morgan (1998).
83 This paper will describe the focus group findings.

84 The focus group interview guide was comprised of six guiding questions: 1. What are your experiences of
85 being a pregnant teenager? (probe: family, partner, peers, community, lifestyle, health professionals, school);
86 2. How do you feel about being pregnant? (probe: feelings of anxiety, insomnia and depression, suicidal); 3.
87 What are your dreams and hopes for the future? (probe: career, child, relationship with partner/baby's father,
88 friends and family memberparents/guardian); 4. What are the barriers to achieving your dreams and hopes?; 5.
89 What type of things do you believe will help you to achieve your goals for the future? (probe: family community,
90 government); 6. What personal strengths do you have that will help you to cope with being a pregnant teenager?
91 It was our desire to solicit the teen's perceptions of how the clinic, government or community could generally help
92 teens more. The two focus groups, lasting one hour each, were audio recorded. Refreshments were provided and
93 ground rules for the group discussion surrounding taking turns at speaking, freedoms and respectful listening, etc.
94 Content analysis was performed using NVIVO 10 software, however the difficulty with translating the Jamaican
95 Patois dialect for NVIVO made it necessary to perform manual review of each focus group. University of the West
96 Indies, Ryerson University, the Ministry of Health in Jamaica and the South East Regional Health Authority in
97 Jamaica each granted ethics approval for the study. III.

98 3 Results

99 Following are themes that are currently were coded. "TR" denotes a Teen Clinic respondent and "SR" denotes
100 a standard antenatal clinic respondent. English translations are provided in brackets.

101 1. Integration into family and Autonomy: Many of the teens experienced "disintegration and desertion".

102 Consistently the pregnancy was a phenomenon that parents, friends, community, teachers and family indicated
103 was a disappointment and a tragedy that the teen had permitted or had allowed to take place.

104 There was an element of malice, stereotyping and judgment of the teen. There was little discussion of the role
105 of the boyfriend or father of the baby. The implication was that the mother shouldered all of the responsibility
106 and burden for reproductive choices. Consequently social support was often absent initially and relationships
107 were strained. TR1: "look there when you going school you are form captain, you shouldn't let this happen to
108 you" and I feel left out? that I spoil up myself" TR5: "Sometimes I feel left out because when it just happen to
109 me I look into myself and say look here I can't get to graduate from school and I can't get to do my exams and
110 those things. My mother curses me and says how I make this to happen to me and I am not out of school as
111 yet. My uncle curse me and beat me on top of it, curse me and call me dog sh-and those things and why I go
112 and get pregnant so early. And I end up and went and live with my boyfriend?" TR6: "Like they would say she
113 a breed (is pregnant) and she don't know who she a breed (is pregnant) for. Look how she young and she go get
114 pregnant early and them sumn deh (those things), but I really don't care what they say." SR7: First for me I was
115 vex I ask God if it is a curse that he has carry down on me, it never happen to nobody by my mother side?.the
116 three of us get pregnant at fifteen?. I did kind of feel angry. But after a while I say; 'sex did not trouble me; is
117 me that go and trouble it!' So I get what it comes with?

118 **4 Integration into community and culture:**

119 The unconditional, strong support experienced by some teens from either family, friends or larger community
120 provided a sense of continued acceptance and agency. Elective termination of pregnancy is illegal in Jamaica
121 so initial suggestions by friends, partners and family may have been suggesting illegal and dangerous abortion.
122 Despite the initial suggestions, all of the teens reported a champion (a father, mother or grandmother) who
123 rejected the concept of abortion; often for religious reasons or because the mother or grandmother had also
124 experienced adolescent pregnancy. These champions became advocates for the teens and seemed to broker
125 respect and support for the teenager from dissenting family members in the form of continued shelter in the
126 home, promises to assist with infant care, and encouragement to return to school after the birth.

127 TR5: "And my father hear and say it happen already because they were telling my mother to let me dash it
128 wey (throw it away or have an abortion), and she didn't do it, and my father say no he doesn't believe in that,
129 my father say to bring it and when the baby born I can get to go back to school." TR2: "And some are saying
130 to dash it weh (throw it away), some are saying don't do it and everybody have their own. So it's like, now
131 everybody treats me nice. Nobody no really show me no bad face or anything. They are always encouraging me
132 saying when I have the baby I must go back to school and I am not to get pregnant again. So now it is alright
133 but at first it was like you know when you can't believe they just cuss (curse) and cry, but now everybody is all
134 right." TR3: "Because my best friend we used to walk with and so; when I tell her that I am pregnant, she a the
135 only person that I tell, she walk and spread it in the school and tell everybody say me am pregnant, and then
136 one of me friend them, she really close, close? when she hear, she did call and support me and so and so; she
137 talk to me, she even give me things for the baby."

138 TR5: Because all the things that I was thinking about pass through and gone, stress free. [Interviewer: "What
139 would you think has helped you to become stress free ??"] Well my mother because she is always there for me.

140 SR7: For me he (boyfriend) is always there if I send him please call me at three o clock in the morning in less
141 than five minutes he call? Disintegration from community: Lack of integration with family or community often
142 resulting in "hiding until discovery". In many instances, teens chose to hide their growing presumptive signs of
143 pregnancy such as enlarging breasts, belly, fatigue, dizziness and nausea. They went as far as hiding this from
144 parents, teachers and school nurses until pregnancy was confirmed requiring their forced withdrawal from school.

145 Some of the students decided to voluntarily drop out prior to the discovery, and only two made the decision
146 to attend one of the eight Women's Center Foundation Schools for pregnant teens.

147 **5 Volume XIV Issue III Version I**

148 **6 (H)**

149 TR3: And then one day me find out, me friend weh a walk (who walks) and a talk pure bad things about me,
150 my close friend, the other day I heard that she get pregnant and gone a country gone hide (went to the rural
151 areas to hide).

152 **7 a) b)**

153 Precarious integration and agency: There were varying levels of social and financial support from partners.
154 Relationships appeared to be tenuous and insecure. There were concerns about financial support for the child.
155 TR1: "Because the mistake that he made from the beginning the first time. From that I hate him and he is wild,
156 he is not from a poor family and he is "spoil" (permiscuous). He is good looking he is full of too much woman."
157 TR2: "My partner is "wild" (permiscuous) as well but I tell him any day I come and see any school girls I am
158 going to burn him up with acid." (All of the participants laughed.) TR3: "Well I get support from my baby
159 father because every time that he gets pay he always gives me money to buy things for myself." [Interviewer: "So

160 you have his support?"]" I have his family support as well because his mother buys things for me and so." TR1:
161 But you won't achieve anything so you just leave him, it doesn't make sense that you burn him up and then
162 you into difficulty and you get lock up and leave your young baby TR4: I say if he wants to have other woman,
163 him have other woman. But once he is giving me my child money, I am all right. SR4: In the beginning he was
164 telling me to throw it away. He say he is afraid. But because his mother is a nurse, she tell him to take the
165 baby and don't throw it away? SR5: In the beginning I was wondering like how am I going to manage, how am
166 I going to do this I wonder if my baby father is going to help me later on in life, and then I am saying Jah know
167 I am going to buy a cutlass and sharpen it for him?! SR5: When I found out that I was pregnant I told my baby
168 father, first he was saying like I don't ready to be a father. So I was saying did I tell you that I am ready to be
169 a mother? So he was saying like it is a mistake; so I say no it is not a mistake. It is just a situation that was
170 not being planned for, and he told his mother?. And because my mother isn't working and he isn't working now
171 some of the basic things that I need now, we can't buy them because funds are low. But for emotional support
172 and stuff like that she is there for me emotionally but financially because he isn't working it is difficult. SR3:
173 My baby father, I cannot walk to go anywhere he is over protective. Every morning he wakes me up out of my
174 bed. He doesn't want me going anywhere. I have to stay there with him. He is just over protective. His mother
175 is there. His sister his aunty everybody is just there.

176 TR1: "I-s (I) just don't listen to negative things just move on and head for your goals and set your mind to it,
177 and see to it that no one or nothing can stop you!" TR5: "Just be confident?Of yourself being a teenager, being
178 pregnant as a teenager." TR3: "Well I just have to believe in myself and hold up my head and make sure that I
179 get my education and make something out of my life, although I have buck my toe at least I can hold up my head
180 because if I put my mind to it I can do it. I can further my education and so on." TR4: "Well family, holds my
181 head high." TR2: "Just believing in myself and know that this is not the last and this is an error, and although
182 you make an error you can complete it, you know just get over it be myself and just move on and know that this
183 is not going to be the last of me and hope is there, and just believe in myself." The standard clinic participants
184 reported that their strengths included perseverance, SR7: "Anything I put my head to I always get that because
185 I am not less, even if it take five years I have to get it." SR5: "Because anything I put my mind to I will do it
186 and I can do it, so if I put my mind to something and say I am going to do it no matter what obstacle may come
187 or no matter what, I am going to try my best to do it, no matter how many times I fall down but to brush off
188 myself and I am going to get up and move forward. So as long as I have the support of my family and they are
189 going to say you made a mistake and falling down don't mean you are a failure but staying down. So as long as
190 I have that support I know that I will be okay and I can go through." One of the standard clinic participants
191 believed she had no personal strengths at all. Disintegration of Self: Psychological distress was the most evident
192 expression of cultural conflict and lack of resilience, coherence and mental health as described by Antonovsky's
193 Sense of Coherence Scale (Klepp et al 2007). For three participants at the standard antenatal clinic, there was
194 evidence of prior psychological distress with the discovery of pregnancy that apparently resolved in response to
195 social support. SR7: "At first I did feel as if I wanted to run away, my mother did see it in the first time because
196 normally I

197 8 (H)

198 Integration into culture and level of self-esteem: This element was most often expressed in the teen mothers'
199 sense of self and personal strengths. would watch TV and those things. And when I just find out I just keep
200 myself to myself. I wouldn't talk to people. When I go to school, normally I would participate in class discussion.
201 I don't really talk at school. I just sit down at the back of the class look on everybody and cry. I never use to
202 eat and those things." SR4: "When I was pregnant I say I want to hang myself because I say nobody is going to
203 like me again, is not saying I don't want the baby but? My mother tell me c) d) e)

204 saying that it done come already and it can't go away, say it done come already it can't go away again." SR6:
205 "When I find out that I am pregnant I think that my career is over because I want to become a criminal lawyer.
206 I think that over and done with and I start crying. (I) mix up all kind of something to kill myself and whatever,
207 and then I go to my baby father and say 'you know I am going to kill myself' and he say 'What you say? You
208 mad?' and him say 'Guess what? I hear about a school where you can go, name Woman Center' and then I say,
209 really like something just come over me and that I feel good, I don't feel down again."

210 Life Skills/parenting/Critical Thinking/Negotiation/ Financial Competency/Resilience: This domain was
211 most often expressed in the teen mothers' hopes for school, coping, and future orientation. TR1: "At first I
212 was sad and I regret that I got pregnant but I don't regret my child. I regret that I got pregnant because I drop
213 out of school and I have to start all over again, I miss out a lot but I end up to start woman center(Women's
214 Center of Jamaica Foundation) and I catch up back and me get along well (I am getting along well)." TR1: "My
215 plan is to because my mommy promise me she will keep the baby and let me go back to school, is to go back to
216 school and do my CXC and get them, and let my mother feel proud because in the future I would like to become
217 a nurse or a paediatrician. So she says she will pay the university fee and let me become what I want." TR6: "My
218 future plans is to finish school I plan to become a teacher." TR3: "Well I plan to go back to school and further
219 my education, because before I got pregnant I usually get promotion at school. They usually promote me and I
220 always say I want to be a lawyer so I want to go back to school and get my CXC (comprehensive exams), further
221 my education." TR2: "?So me (I) just think that the baby would be a barrier; but nothing try nothing done. I

222 still want to try and go back to school I won't say I will not go back to school because they won't keep my baby
223 or what, I just have my intention to go back to school and say yea, even if I go back to school I must can find even
224 one person to keep the baby or my friend you understand, money and lack of ability, knowledge or skills became
225 the largest barriers to goal achievement. Sometimes the support system (boyfriend, family, healthcare providers,
226 the Women's Center of Jamaican Foundation secondary school program for pregnant adolescents) were able to
227 be a broker for knowledge and skills that would prove to be pivotal to future goal achievement. TR1: "A good
228 family support people to encourage you with positive things?. I mean your parents, grandparents and aunt and
229 some other relatives there with you to encourage you and like sometimes help out to keep the baby and so?? Like
230 see to it that you don't miss a day from school and you don't joke it out this time. You make a mistake once."

231 [Interviewer: "?You say 'encouragement'. What do you mean by that?"] TR1:"I mean your parents,
232 grandparents and aunt and some other relatives there with you to encourage you and like sometimes help out to
233 keep the baby and so?. Like see to it that you don't miss a day from school and you don't joke it out this time.
234 You make a mistake once." TR2: "I think the government plays a big part in teenage pregnancy when they put
235 out the women center, when they organized that together. I think they play a big part and their support for us
236 because one time my cousin get pregnant and my cousin did always want to go back to school, but because in
237 her days that wasn't going on so I think now what they really do is a big part, because you can still go back
238 to school where you are going to a normal school where you can do your CXC (Caribbean Examination council
239 exams) normally? You know you also have to have a work to balance because when you can go to school and
240 guidance counselor will assist you with lunch, if you don't have any money and those things you won't get those
241 things at CAP. You just have to stay home so whenever you don't have any money you are going to miss out a
242 lot, because you won't go to school and beg. So I think the government plays a big part when they put women's
243 center." SR5: "My barrier is money that has always been a problem for me going to school and that is a problem
244 until I can find something to do to send myself back to school, that is the only barrier."

245 Volume XIV Issue III Version I 57 (H) so me just think it is a barrier but I am not sure but I just think."

246 The standard clinic focus group participants described dreams of becoming a pharmacist, lawyer, accountant,
247 business teacher, or pursuing community college to learn a trade. Only one teen of the 13 dreamt of becoming a
248 mother.

249 **9 Economic**

250 Power/Education/Job Skills: Socioeconomic power was the strongest drivertowards meeting this determinant.
251 Lack of The teens also described drivers to reach their goals including good family support, money, and support
252 from friends who provide motivation.

253 Power/Education/Skills coming from Healthcare system: The teen mothers' perceptions of the healthcare
254 system became a gauge for measuring whether effective empowerment was taking place. TR4: "Well when they
255 talk to you, they don't talk to you like to say yea I am talking to her for her to hear; the way they talk to you is
256 like somebody cursing, that is how some of them talk to you."f) g) h)

257 TR1: "I believe that if you respect the nurse them and corporate with them, wear decent things they would
258 like respect you back and don't be rude to you?. : But from me start coming down here none of them never yet
259 rude to me, never even when I was on wards none of them." TR2: "I agree with TR1, because like when you are
260 doing things that you are not supposed to do they will shout at you and hail at you. The time when I just come
261 in down here and I never really expect nothing to do, I never really buy any dress and those things and I never
262 really like those things, I always like shorts, pants and tights, so I wear a tights and a blouse to my opinion me
263 did look nice, everybody tell me that I look nice. But when I come down here me and the nurse and she was like
264 how you suppose to wear tights come to the clinic, you know that you are not supposed to wear tights come to
265 clinic, and that is the only problem I have. But she is a really nice nurse because that was only the one time and
266 the nurse them down here are nice, and when you show them respect they show you respect too, especially when
267 you go to see the doctor, I think they are nice." TR1: "The first time I came here I was in pants and a blouse and
268 the nurse shout after me and say that I must not wear it back again. Well I didn't know that I wasn't to wear
269 pants it was my aunty who had send me out when she saw me in the pants, but know I get to know them better."
270 TR3: "Some of them will get miserable when they call the name and you don't answer." TR2: "For me none
271 of them never yet complain, because I am from a decent home my mommy she is like strict, my grandmother.
272 My mommy she work Saturdays and Sundays so she don't really get to go to church, but my grandmother goes
273 to church. So I have a lot of dress I don't let none of them talk to me about, it is not too short, not too tight
274 nor look indecent." SR6: "My doctors they were nice?.When I go (to the clinic) it's a different experience. They
275 come in like a family to me they treat me nice. Things that I don't understand they tell me." SR3: "I love the
276 doctors them down here, they are nice I like them overall no problem with them."

277 IV.

278 **10 Discussion**

279 The focus groups data provided complimentary information to the earlier individual interviews. The focus group
280 findings were very consistent with the earlier interviews, published elsewhere. That is; the common themes were

281 also noted: social support, resilience, future-oriented decision-making about career, community support, and
282 previous history with elements of psychological distress.

283 Despite a few tearful moments and two previous suicidal ideations in the standard clinic group, none of the
284 group members exhibited the same intensity of psychological distress or suicidal ideation identified by 7 out of
285 30 participants in the individual interviews (Wilson-Mitchell, Bennett & Stennett 2014). Instead there was a
286 determination to return to school, achieve goals, maintain dignity and a strong display of strength to demand
287 respect from peers and community or to "hold my head up high". The standard clinic group appeared to use
288 more violent language (e.g., using cutlass, fighting, threats of "killing" others -either in anger or in jest). The
289 teen clinic group offered significantly more feedback on their experience and perception of the quality of care
290 experienced in their antenatal clinic. Overall however, the experiences in the five domains were similar.

291 There was rich evidence to support further development of the Psycho-Social Determinants of Maternal
292 Adolescent Health Model. This is a global or international approach to teen pregnancy that supports cultural
293 nuances in the teen culture of the Caribbean. This model assumes that adolescents are full of potential and
294 inherent resilience. Healthcare providers are not always required to intervene for each determinant to be effective.
295 Intervention in one area strengthens the other determinants. This relationship is illustrated by Figure ??.
296 The model also implies social responsibility of the healthcare provider. Wellintentioned, good-willed healthcare
297 providers may further isolate teens by their attitudes, medical procedures and interventions. Teens don't need or
298 desire "prescriptive" interventions. Rather we need to "equip" teens by strengthening their resilience, negotiation
299 skills and assertiveness. Inter-culture plays a role in the degree of family, cultural and community integration. So
300 a teen living in a community with a "don" or gang-leader has different psycho-social determinants of health than
301 you might find otherwise. For a teen, cultural safety might mean a community where there is cultural support
302 and infrastructure; e.g., a community spaces that provide emotional and cultural safety for recreation, interaction
303 and expressive creativity. The provision of cultural safety could in fact be crucial to the prevention of adolescent
304 pregnancy.

305 11 (H)

306 It was notable that family and community support was a dynamic process. Many family members, including
307 the teens' mothers appeared to experience loss, grief and shock before they emerged as advocates and sources
308 of support for the teens. As described in literature, a large portion of the population of women experience
309 their first pregnancy during adolescence, and this cycle was apparent in some of the families of the teens in the
310 groups ??Fox 2005, Maharaj 2009, & Serbanescu et al 2010). Despite the high incidence amongst their friends
311 and an acknowledgement of single-motherhood being a barrier or challenge to future education, none of the
312 teens proposed any methods of curbing the trends. None of them challenged the notion that they had somehow
313 "caused" this tragedy or "allowed it" to occur. There was discussion of the promiscuity of their partners in some
314 cases and a high frequency of partners suggesting abortions with the diagnosis of pregnancy. However there
315 appeared to be deficits in knowledge, critical thinking and emotional immaturity amongst the mothers; all of
316 which are necessary if pregnancy prevention strategies are to be addressed. Furthermore the teens did not seem
317 to consider themselves as autonomous agents in their reproductive decision-making. The phenomenon of male
318 dominant "gender power" within relationships, as well as poverty, gender roles and social norms have all been
319 used to explain the lack of female decision-making observed in Jamaican adolescent relationships (Chevannes
320 2001 ?? Ekunadayo et al 2007, Hutchinson et al 2012). None of these pregnancies were planned, yet the mothers'
321 resolution to participate in the challenging tasks of motherhood while trying to return to school was laudable.

322 This study did not examine any of the obstetrical outcomes of these pregnant adolescents. There was only one
323 teen who described severe hyperemesis and vomiting blood. One appeared to have symptoms of vaginitis. None
324 described gestational hypertension, diabetes, thyroid disease, sexually transmitted infections or sickle cell disease;
325 all of which have placed Jamaican mothers at risk for preterm birth, seizures and life-threatening complications at
326 birth. Current Jamaican statistics do not adequately track the birth outcomes of adolescent teens, however their
327 tendency to attend prenatal care late in pregnancy probably contributes greatly to their risks for antepartal and
328 postpartal hemorrhage, preterm birth and uncontrolled gestational hypertension. In addition, the relative poverty
329 that many teens experience implies that they lack many of the World Health Organization social determinants
330 of health that support health in general.

331 The focus group discussions appeared to provide a small degree of support, encouraging more disclosure, peer
332 support and peer coaching from one adolescent to another. The animation and apparent enjoyment the teens
333 were experiencing from group discussion and the active listening of the group facilitators was instructive. It
334 might be helpful not only to have adolescent antenatal care in an exclusively adolescent space, but it may also be
335 helpful to employ group prenatal care for the model of delivery. In fact, the Teen Pregnancy Clinic did provide an
336 ideal environment for this to take place. The lactation, nutrition and parenting teachers who visited the waiting
337 area may not have been trained as prenatal group facilitators, however this training could easily be provided.
338 The notion of training all of the adjunct or allied healthcare staff to support midwifery, obstetrics and nursing
339 in an antenatal clinic has been utilized in a Florida birth center, The Birth Place, by employing the JJ Way
340 ® care management system (Day et al 2014). The JJ Way® philosophy emphasizes the need for all the clinic
341 staff to promote the tenets of access, connections, knowledge and empowerment. This frame work interfaces
342 well with the group prenatal care model (Massey 2006). Both the JJ Way ® and group prenatal care have been

343 documented to provide improved outcomes (Day 2014, Massey 2006). These benefits include: decreasing the rate
344 of preterm birth, lowering the percentage of low birth weight and improving patient satisfaction, compliance and
345 early engagement of vulnerable women with prenatal care.

346 Universal access to healthcare and medications (PIJ 2009) for the largest portion of the population, in the lower
347 socioeconomic levels has been a significant accomplishment for Jamaica. The next steps may be to support teen-
348 centered adolescent clinics that utilize the And so this study's findings were examined in light of the Millennium
349 Developmental Goals (MDG) 4, 5 and 6 (United Nations 2013). Although the maternal mortality ratio (MMR)
350 declined from 82.2 per 100,000 live births (LB) in 1990 to 50.5 LB in 2011 (Hogan 2010), Jamaican health policy
351 makers report that the country will most likely not achieve the goal of decreasing maternal mortality of by 75% by
352 2015. Fortunately, the early neonatal mortality rate (0-6 days) annualized decline was between 1.8 to 4.8 per 1000
353 LB (Lozano 2011). The proposed post-2015 World Health Organization (WHO) Universal Goals will continue
354 to prioritize the health of women and girls, promote education throughout the lifespan, and promote healthy
355 lives. A reduction of adolescent pregnancy, improved adolescent maternity care and completion of education
356 for adolescent mothers could be effective strategies for achieving these Universal Goals in Jamaica. The teens
357 appeared to appreciate the teen-centered approach to care delivery. Once they learnt the expectations for clinic
358 dress code, routines during the visit, and basic needs were met, the teens verbalized appreciation for their care
359 givers and reported empowering communication and interactions in both clinics. However, the standard antenatal
360 clinic set-up contributed to frustrations about the long wait and perceptions of uncaring staff and adult patients.

361 existing infrastructure and staffing to deliver more purposeful and structured group prenatal care that is
362 informed by a social justice and youth empowerment models. Other recommendation semerging from this study
363 include: the need to continue to support and expand the education programs of the Women's Center of Jamaica
364 Foundation, to follow up with research that discovers new ways of connecting and engaging with adolescents for
365 reproductive education, post-pregnancy education and perhaps peer support programs that strengthen agency
366 for adolescent girls.

367 In conclusion, the Psycho-Social Determinants of Maternal Adolescent Health Model stresses inclusivity and
368 youth as a subculture within the larger culture. The model could be an effective framework from which to fashion
369 innovative maternity care. Legally, teenagers under age 16 in Jamaica are considered minors.

370 adolescents and encourage participation in the decision-making process regarding their own health.

371 V.

372 12 (H)

1

Demographics	Total Population N = 13	Standard N = 7	Teen-Centered N = 6
Mean Age in Years	15.85(SD)	16.00	15.67
14	1	0	1
15	0	0	0
16	12	7	5
Gestational Age (months)			
6	4	1	3
7	2	1	1
8	5	4	1

Figure 1: Table 1 :

373 1 2 3 4

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²This model is a dynamic one and so interventions will be unique for each teen culture and each new context. For example, with adolescent mothers, on this particular day it may be psychosocial needs, and on another given day it might be financial needs that need to be addressed. It's important to use the language of the adolescent. In order to demonstrate empathy, the service provider needs to speak to the mother's perspectives, visit her in her community, and not just in the clinic. On any given day, the teen's needs for strengthening her psycho-social determinants of health may change in priority and urgency. Each situation needs to be assessed as unique.

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